

The People's Liberation Army *as* Organization

Reference Volume v1.0

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PREFACE

This volume is the product of a conference, jointly sponsored by the RAND Center for Asia-Pacific Policy (CAPP) and the Taiwan-based Chinese Council of Advanced Policy Studies (CAPS). The meeting was held at Airlie House in Warrenton, Virginia from 3-6 August 2000, and brought together many of the nation's top experts to evaluate issues of structure and process in the Chinese People's Liberation Army (PLA). The resulting volume is a pathbreaking reference work on PLA organization.

While CAPS provided the primary financial support for the conference, RAND's Center for Asia-Pacific Policy supplied the funding for the publication of this volume.

Comments are welcome and should be directed to the chief editor, Dr. James Mulvenon:

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EDITOR'S NOTE

This volume is a landmark contribution to the field of Chinese military studies. For years, the Soviet military studies field was replete with detailed organizational analyses, but a variety of factors, primarily the opacity of the Chinese system, prevented similar progress in research on the People's Liberation Army (PLA). Nor was study of PLA organization a high priority for members of the field, given the dearth of knowledge across the board. Instead, the first four decades of PLA studies in the non-governmental realm focused on topics that lent themselves to exploration via limited, official open sources, such as political work or civil-military relations. The avalanche of new open sources and so-called "grey literature" (internal or unofficial military-related publications) in recent years, however, now permits highly detailed examination of the Chinese military's organizational structure.

In June 2000, CAPS and RAND co-hosted their annual PLA field conference. The title of the conference was "The PLA as Organization." Paperwriters were carefully chosen for their specific expertise on service branches or organizations within the PLA. Many of the researchers had spent their careers primarily focusing on one organization, though few had taken the time to draw a detailed organization portrait. The organizers distributed explicit criteria for the papers, and staffed the panels with discussants almost equally as familiar with the topic. The results of the conference exceeded all expectations. It was clear that the usual annual edited volume would be different in tone and content from all previous CAPS-RAND books.

One special challenge for the editors was the issue of military unit code designators (MUCDs). The paperwriters had been able to assemble many of the MUCDs for units in the PLA, sometimes down to very low levels of the system. While some concerns were raised that the publishing of these MUCDs might compromise various signal intelligence collection efforts by the US government or cause the PLA to more carefully police its open source publications, the editors felt that this data was already in the public domain largely and therefore should be included where possible. A second problem arose in October 2000, when the PLA scrapped its previous MUCD system and replaced it wholesale. Some of the paperwriters upon revision have been able to piece together the new system, but most of the MUCDs in this volume are derived from the pre-October 2000 system. For readers, pre-October 2000 MUCDs are listed in normal font, while MUCDs of the new system are **bolded**.

The title of this volume was also chosen carefully. The top-level title "The PLA as Organization" reflects the editor's core belief that fundamental knowledge about the PLA can be ascertained from study of its organizational structure, and that this type of structure and process analysis is the critical first step towards a revolution in our understanding of the central issues, including how the PLA will fight. The sub-titling of this report as a "reference volume" is admittedly immodest, but the organizers of the 2000 CAPS-RAND conference strove hard to enforce comprehensiveness and maximize comparative value in the selection and execution of the submissions to the research project. The rich content of this report is testament to the success of the effort, but our picture of PLA institutional structure is far from complete. Thus, the explicit notation that

this is simply the first iteration of a multi-volume effort. It is the hope of the editors that the field will regard this volume as a collective, public good. Any corrections or additions to the data are not just welcome, but are considered essential to the long-term growth of the field. Contributors may forward corrections to the authors, but please also send the additions to myself at RAND, so that the data of the reference volume can be assembled in one place and included in all future volumes.

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August 2002

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The editors would like to acknowledge first the financial support of CAPS for the annual CAPS-RAND Chinese military conference, as well as the perennial logistical excellence of Andrew and Yi-Su Yang. The financing of this publication was provided by RAND's National Security Research Division, especially Kevin O'Connell. This volume would never have seen the light of day without the tireless dedication to mind-numbing detail of our resident template guru, Heather Roy. Finally, the editors would like to thank the members of the growing CAPS-RAND family, whose dedication to objective research has transformed our annual gatherings into the premier field conference.

GLOSSARY

AAW	Anti-Air Warfare
ADM	Admiral
AOR	Area of Responsibility
ASW	Anti-Submarine Warfare
ASUW	Anti-Surface Warfare
CCP	Chinese Communist Party
CMC	Central Military Commission
DDG	Guided-Missile Destroyer
Dept	Department
FFG	Guided-Missile Frigate
GSD	General Staff Department
IRBM	Intermediate Range Ballistic Missile
KMT	Kuomintang
LSM	Landing Ship Mechanized
LST	Landing Ship Tank
MIW	Mine Warfare
NM	Nautical Miles
MR	Military Region
MSA	Maritime Safety Administration
PAP	People's Armed Police
PLA	People's Liberation Army
PLAAF	People's Liberation Army-Air Force
PLAN	People's Liberation Army-Navy
PLANAF	People's Liberation Army-Navy Air Force
RADM	Rear Admiral
ROTC	Reserve Officers Training Corps
SAR	Search and Rescue
SCOL	Senior Colonel
SEATO	Southeast Asia Treaty Organization
SRBOC	Ship Rapid Blooming Offboard Chaff
Sr.Capt.	Senior Captain
SS	Diesel/Electric-powered Attack Submarine
SSB	Diesel/Electric-powered Ballistic Missile Submarine
SSBN	Nuclear-powered Ballistic Missile Submarine
SSN	Nuclear-powered Attack Submarine
UN	United Nations
VADM	Vice Admiral

1. INTRODUCTION TO THE PLA'S ADMINISTRATIVE AND OPERATIONAL STRUCTURE

By Kenneth Allen^{1 2}

Throughout its history, the organizational system (*zuzhi tizhi*) of the People's Liberation Army (PLA) has been shaped by numerous components, including operational and administrative organizations, operational areas, service arms, training units, logistics and maintenance support units, schools and academies, and research institutes. The political structure, including Party Committees and Party Standing Committees,³ has also been an integral part of the PLA, especially during the period when the Chinese Communist Party (CCP) and the army were virtually synonymous.⁴

¹ Kenneth Allen is a Senior Analyst at the CNA Corporation, a non-profit research and analysis organization. Prior to this, he was a Senior Analyst at TASC, Senior Associate at the Henry L. Stimson Center, Executive Vice President of the US-Taiwan Business Council, and served 21 years in the U.S. Air Force, including an assignment as the Assistant Air Force Attache in China from 1987-1989. He received a BA from the University of California at Davis, a BA from the University of Maryland in Asian Studies, and an MA from Boston University in International Relations.

² The author would like to recognize Dr. Paul Godwin, John Corbett, and Ellis Melvin for the time they spent reviewing drafts and making substantive comments.

³ Every headquarters within the PLA has a Party Committee (*dangwei*) and a Party Committee Standing Committee (*dangwei changwei*). The political commissar is generally the secretary and the commander is the deputy secretary of each committee. The deputy commanders, deputy political commissars, chief of staff (director of the headquarters department), deputy chiefs of staff, and the three other first-level department directors make up the rest of the Standing Committee. The Party Committee consists of the Standing Committee members plus senior representatives from lower-echelon organizations.

⁴ For example, Deng Xiaoping served in several military posts, including field army political commissar positions, chief of the general staff, and vice chairman and chairman of the CMC. He also held key Party and State positions, including CCP secretary-general and vice premier. Deng was born in 1904 and went to France to study after World War I, where he became good friends with China's future premier, Zhou Enlai. Deng went from France to Moscow to attend Sun Yat-sen University, then returned to China in 1929, where. He became the secretary-general of the Communist Party and a deputy premier in 1954. The following year, he was named to the Politburo. After Mao removed him from all of his posts at the beginning of the Cultural Revolution in 1966, he quietly reappeared as the deputy premier and Party vice chairman in 1973 with the help of his mentor Zhou Enlai. He became the PLA's Chief of the General Staff

The purpose of this chapter is to provide an overview of how the PLA's operational and administrative structure has evolved over the past seventy years. The remaining chapters will deal with the individual components of the PLA.

PLA OPERATIONAL ORGANIZATION STRUCTURE

The People's Republic of China (PRC) celebrates its Armed Forces Day on August 1st (*bayi*), which represents the birth of the Red Army (*hongjun*) on 1 August 1927.⁵ Since its founding, the Red Army and PLA have undergone several major reorganizations, involving both administrative and operational structures. The Central Military Commission (CMC)⁶ did not begin designating units as part of the PLA until the mid-1940s. As the fluid nature of the civil war against the Nationalist Party (Kuomintang/KMT) forces progressed through the late 1940s, Red Army units, particularly the Eighth Route Army (*balujun*) and New Fourth Army (*xinsijun*), were consolidated into the PLA as they moved around China. Other units were still being incorporated into the PLA in late 1949.⁷ Most of these changes were initiated by the

in 1975. However, he was purged again in April 1976 shortly after Zhou died. When he was rehabilitated for the second time at the Third Plenum of the Ninth Party Congress in July 1977, he retained his three previous positions, but also became a vice chairman of the Central Military Commission. Yang Dezhi replaced Deng as chief of the general staff in 1980, and Deng became chairman of Central Military Commission from 1981-1989.

⁵ It was not until June 1933 that the CMC made the decision to designate August 1, 1927 as Armed Forces Day. See Wang Zhenxi, editor, *Shijie junshi nianjian* [World Military Yearbook], Beijing: PLA Press, 1987, pp. 3-8. *Zhongguo renmin jiefang jun da shiji, 1927-1982* [People's Liberation Army Chronicle 1927-1982], Beijing: PLA Academy of Military Science, November 1983, pp. 83, 285.

⁶ The term Central Military Commission or CMC is actually a misnomer. The Chinese term is *zhongguo gongchandang zhongyang junshi weiyuanhui*, which literally means Military Commission of the Central Committee of the Chinese Communist Party. The Chinese term is most commonly shortened to *zhongyang junwei* or *junwei*. Properly speaking, *zhongyang* refers to the Central Committee. While the Chinese term has not changed since its creation, the English translation has changed over the years. In the 1960s and 1970s, the commission was commonly referred to as the Military Affairs Commission (MAC).

⁷ Biographies of PLA officers reflect the importance of the different events from the 1920s through the 1950s. These biographies highlight the following periods: participation in various uprisings during the mid-1920s, such as the Nanchang Uprising in 1927; the Agrarian Revolutionary War period (*tudi geming zhanzheng shiqi*) from 1927-1937; the War of Resistance against Japan (*kangri zhanzheng shiqi*) from 1937-1945, when the Red Army was organized into the Eighth Route Army and New Fourth Army; and China's War of Liberation (*jiefang zhanzheng shiqi*) from 1945-1949. The period following the founding of the PRC in 1949 is divided into participation in the War to

CMC, and have been implemented over one or more years after the decisions were made. The year each major reorganization was initiated is shown in Table 1.1, and will be discussed in detail below.

Table 1.1 Red Army and PLA Major Reorganizations

Year	Major Reorganization Events
1927	First corps established
1930	<i>Juntuan</i> and front armies created; 3-3 system codified
1937	Eighth Route Army and New Fourth Army created
1941	New Fourth Army restructured
1947	Field Armies created
1948	PLA formalized; <i>Bingtuan</i> established; 5 military regions (MR) and 4 MR levels created
1949	PLA Navy and Air Force established
1955	National Defense Council and Ministry of National Defense created; Field Armies and <i>Bingtuan</i> abolished; Corps subordinated directly to MRs; 6 MRs renamed and expanded to 13 MRs; 3 fleets established; 6 MRAFs formed
1957	PLA Air Defense Force abolished and merged into PLA Air Force
1958	8 General Departments reduced to 3
1966	PLA Second Artillery Corps established
1969	13 MRs reduced to 11
1985	11 MRs reduced to 7; major demobilization initiated
1998	General Equipment Department created

Since the early days of the Red Army, the PLA has tried to systematically organize its forces into regional areas and functional groupings that would allow centralized control and decentralized operations. As Table 1.2 shows, the PLA has had three larger groupings for area control – front armies (*fangmianjun*), field armies (*yezhanjun*), and military regions (*junqu*).⁸ The names of the organizations that formed the second and third tiers changed over time, but they served the same basic function of controlling large groups of ground force units. The Chinese terms for these organizational entities include *juntuan* during the 1930s, *bingtuan* and *zongdui* during the 1940s, *jun* during the 1950s-1980s, and *jituanjun* since the mid-1980s. The PLA's Academy of Military Science (AMS) translates *juntuan* as a large formation, *bingtuan* as a formation, *jituanjun* as an

Resist U.S. Aggression and Aid Korea (*kangmei yuanchao shiqi*) from 1950-1953 and the post-war period. Biographies also include several key individual events singled out during these periods: when they joined the Red Army, participation in the Long March (1934-1935), attendance at various Red Army political schools, and participation in the Korean War.

⁸ Yao Yanjing, Lai Mingchuan, Wang Yamin, *Junshi zuzhi tizhi yanjiu* [Military Organization System Research], Beijing, NDU Press, June 1997, pp. 377-384.

army,⁹ and *jun* as a corps.¹⁰ The term *zongdui* is generally translated as column and reflects an organization composed of several brigades at the corps level.¹¹ Subordinate to these are the operational units (*zuozhan budui*) at the division level and below.

Table 1.2 Red Army and PLA Organization Levels: 1920s-1980s

1930s	1940s	1950s	1980s
Front Army (<i>fangmianjun</i>)	Field Army (<i>yezhanjun</i>)	Military Regions (<i>junqu</i>)	Military Regions
Juntuan	Bingtuan		Army (<i>jituanjun</i>)
Corps (<i>jun</i>)	Column (<i>zongdui</i>), Corps (<i>jun</i>)	Corps (<i>jun</i>)	
Division	Division	Division/Brigade	Division/Brigade
Brigade	Brigade		
Regiment	Regiment	Regiment	Regiment

While the Chinese clearly understand the terms *juntuan*, *bingtuan*, *jituanjun*, and *jun*, they are not easily translated into English.¹² Although the table shows the *juntuan*, *bingtuan*, and *jituanjun* as organizations at the same level, they are not equal. It is better to look at them in terms of levels of headquarters.¹³ If the PLA had first, second, and third-level armies, then there would be a fairly accurate delineation. At the top would be

⁹ The US Government identifies a *jituanjun* as a group army.

¹⁰ *Zhongguo junshi baike quanshu* [Chinese Military Encyclopedia], Beijing: Academy of Military Science Publishers, July 1997, Volume 7-13, pp. 275, 321, 401.

¹¹ Yuan Wei, ed., *zhongguo renmin jiefang jun wu da yezhan budui fazhan shi lue* [History of the People's Liberation Army's Five Field Armies], Beijing: PLA Press, 1987.

¹² In his study on China's high command, William Whitson translates *bingtuan* as army and the subordinate *jun* as corps, but others translate *bingtuan* as a group army and *jun* as an army. William W. Whitson, *The Chinese High Command: A History of Communist Military Politics, 1927-71*, New York: Praeger Publishers, 1973. Michael D. Swaine, *The Military & Political Succession in China*, Santa Monica: RAND, 1992, p. 243, provides an update to Whitson's chronology for the PLA's evolution. After 1949, the main PLA organization was the *jun*. While Whitson and Swaine call these units corps, the Defense Intelligence Agency calls them armies. See *Handbook on the Chinese Armed Forces*, Washington, D.C.: Defense Intelligence Agency, DDI-2680-32-76, July 1976; and *Handbook of the Chinese People's Liberation Army*, Washington, D.C.: Defense Intelligence Agency, DDB-2680-32-84, November 1984.

¹³ This framework is based on discussions with John Corbett.

the *juntuan*, which more closely translates as an army group. A *juntuan* is a formation that, if used in the US Army, would command more than one *bingtuan*, which is essentially a group of armies. In the Chinese case, an army equates to a US Army corps-level organization (i.e. composed of more than one maneuver division). If *bingtuan* was an operational concept today for maneuver units, then a *bingtuan* would be composed of two or more *jituanjun* or corps-level units, which would in turn have subordinate division-level maneuver units and assorted lower-level units based on specialty. In other words, the *jituanjun* would be the operational units that are subordinate to the *bingtuan* or the *juntuan*. Although the PLA no longer has *juntuan* and *bingtuan* as organizational entities, these terms are oftentimes used to depict certain organizational levels within the overall PLA structure.

Some PLA writings refer to a division as an “operational and tactical *bingtuan*” at the combat (*zhandou*) level of war. What exactly does this mean? Historically, the PLA has divided its twelve organizational entities (from the general departments to the squad level) into various functional groups or tiers (*cengci jie gou*). PLA writings use the following six groups and assigned organizational entities to refer to the armed forces’ organizational structure during the period of the Red Army and early PLA years.¹⁴

- *Zongbu*: General departments
- *Zhanqu*: Theaters of War/Military regions
- *Juntuan*: Front army, army
- *Bingtuan*: Corps, division, brigade
- *Budui*: Regiment
- *Fendui*: Battalion, company, platoon, squad

Although these categories are still evident in some PLA literature,¹⁵ according to discussions with PLA officials, the PLA ceased using the *juntuan* and *bingtuan* categories

¹⁴ Yao Yanjing, Lai Mingchuan, Wang Yamin, *Junshi zuzhi tizhi yanjiu* [Military Organization System Research], Beijing: NDU Press, June 1997, p. 36; and Xun Zhenying, ed., *Jundui ganbu guanlixue* [Military Cadre Management Studies], Beijing: NDU Press, December 1989, p. 267. The term *cengci jie gou* literally means a tiered or ordered structure. For lack of a better term, the author used “functional groups” merely to indicate that the PLA categorizes certain organizational entities into groups in order to assign certain characteristics to each group.

¹⁵ The PLA AF describes its military region air forces (MRAF) as *zhanyi juntuan*, air corps as *zhanyi zhanshu bingtuan*, air divisions as *zhanshu bingtuan*, air regiments as *zhanshu budui*, and flying groups and squadrons as *zhanshu fendui*. Xin Ming, ed., *Zhongguo renmin jiefangjun kongjun shouce* [People’s Liberation Army Air Force Handbook], Qingdao: Qingdao Publishers, June 1991, pp. 98-99.

during the 1950s and currently uses the following four groups and assigned organizational entities to describe the armed forces:¹⁶

- *Zongbu*: General departments
- *Zhanqu*: Theaters of war/Military regions
- *Budui*: Group army, corps, division, brigade, regiment
- *Fendui*: Battalion, company, platoon, squad

In order to further define the organizational structure, the PLA assigns specific missions (*shiming he renwu*) to each functional group. The three missions are strategic (*zhanlue*), campaign/operational (*zhanyi*), or tactical (*zhanshu*).¹⁷ In addition, the PLA discusses its functional groups and missions in terms of three levels of war (*zuozhan dengji*)¹⁸ – war (*zhanzheng*), campaigns (*zhanyi*), and combat (*zhandou*). Unfortunately, as with other Chinese words, the translations of these terms do not necessarily convey the same concept in English as they do in Chinese.

Table 1.3 PLA Functional Groups and Missions

Functional Groups	Organizational Entity	Missions
<i>Zongbu</i> (General Departments)	General Departments (<i>zongbu</i>)	National Military Strategy (<i>zhanlue</i>)
<i>Zhanqu</i> (Theaters of War)	Military Regions (<i>dajunqu</i>)	Theater Strategy (<i>zhanlue</i>)
<i>Budui</i> (Units)	Army (<i>jituanjun</i>) Corps (<i>jun</i>) Division (<i>shi</i>) Brigade (<i>lü</i>) Regiment (<i>tuan</i>)	Operational and Tactical (<i>zhanyi zhanshu</i>) Operational and Tactical Operational and Tactical Tactical (<i>zhanshu</i>)
<i>Fendui</i> (Elements)	Battalion (<i>ying</i>) Company (<i>lian</i>) Platoon (<i>pai</i>) Squad (<i>ban</i>)	Tactical Tactical Tactical Tactical

¹⁶ Interviews.

¹⁷ The term *zhanyi* is oftentimes confusing, because it can be translated as either campaign or operations. In addition, the qualifiers advanced (*gaoji*) or main (*jiben*) are oftentimes used with these three missions, such as *gaoji zhanyi bingtuan*.

¹⁸ Zhongguo junshi baike quanshu, pp. 690, 748, 763.

Table 1.3 depicts how these concepts fit together.¹⁹ Admittedly, there are holes in the table and some missions overlap, but it provides a general picture of how the PLA views its organizational structure in terms of missions and levels of war. In order to develop a more comprehensive understanding of these missions, the table is followed by an examination of the principal organizations involved in planning and executing war.

Central Military Commission

Although PLA writings do not specifically identify the Central Military Commission as one of the functional groups, with Jiang Zemin dual-hatted as its Chairman and General Secretary of the Communist Party of China (CPC), the CMC functions as the PRC's national command authority.²⁰ In this role, the CMC provides guidance for China's national military strategy and overall war effort. The PLA describes the CMC as the unified command authority for all of China's armed forces; it determines the operational policy (*zuozhan fangzhen*) for military strategy and armed force; it leads and manages the PLA's "army building"; develops plans; approves weapons development and purchases; determines the PLA's organizational structure, missions, and responsibilities; approves promotions and awards for senior officers; and coordinates the PLA's budget with the State Council.²¹ While it is the members of the CMC who revise the national military strategy, the CMC's general office (*bangongting*) is responsible for coordinating the effort among the general departments, services, Academy of Military Science, and National Defense University (NDU) to flesh out the strategy so it can be implemented throughout the rest of the PLA.

General Departments

The four general departments (General Staff, Political, Logistics, and Equipment) as a group, whose leaders are all members of the CMC, are responsible for developing policies for the entire PLA under guidance of the CMC. The PLA describes the General Staff Department as the military leadership organization responsible for organizing the development of the armed forces and for operational command (*zuozhan zhihui*) of the

¹⁹ Chart 3 was created based on interviews with PLA officers, definitions of the different organizations and concepts in various PLA dictionaries and the AMS encyclopedia, plus AMS and NDU books on the PLA's history and organizational structure. The column for missions (using the terms *shiming he renwu*) came specifically from the definition of a *bingtuan* in *Zhongguo junshi baike quanshu* [Chinese Military Encyclopedia], Beijing: Academy of Military Science Publishers, July 1997, Volume 2-13.

²⁰ The US national command authority generally refers to the president and secretary of defense. Ballistic Missile Glossary, Department of Defense Ballistic Missile Defense Organization, October 1997, 206.

²¹ Wang Zhenxi, editor, *Shijie junshi nianjian* [World Military Yearbook], Beijing: PLA Press, 1987, p. 101.

PLA.²² As the command organization for the ground forces, the General Staff Department is also responsible for the policies, plans, training, and equipping of the ground forces.

Theaters of War

The military regions (*junqu*) are the military command and control authority for the combined military units within China's strategic areas, and are responsible for establishing the unified military organization to carry out the nation's strategic and operational (*zhanlue zhanyi*) missions at the campaign level.²³ Although the PLA uses the terms theater of war (*zhanqu*) and military region interchangeably during peacetime, only the term *zhanqu* will be used during wartime. Whereas a military region includes only the permanent units assigned within its boundaries, a theater of war refers to these units plus any other units deployed to the military region or chopped to the headquarters for operational purposes.²⁴ According to China's National Defense University, "The PLA has a unified military region and theater of war structure, whereby the military region's command organization during peacetime is the theater of war's command organization during wartime."²⁵ The Navy, Air Force, and Second Artillery headquarters are also at the military region headquarters level, and are responsible for the plans, policies, and equipping for their forces.

Budui and Fendui

Information on the specific missions and operational levels for the functional groups below the theater of war level are more clearly defined in the PLA's writings. While brigades through group armies are involved in carrying out campaigns and combat at the operational and tactical level, regiments and below carry out combat at the tactical level.²⁶

²² Ibid., p. 102.

²³ Ibid., p. 102.

²⁴ Interview with PLA officials.

²⁵ Interviews with PLA officials. See "China's National Defense in 2000," *Xinhua*, 16 October 2000; and Yao Yanjing, Lai Mingchuan, Wang Yamin, *Junshi zuzhi tizhi yanjiu*, p. 397.

²⁶ *Zhongguo junshi baike quanshu*, pp. 275, 321, 401.

Levels of War

PLA writings refer to war, campaigns, and combat as its three levels of war. As Mao Zedong observed,²⁷ however, war has two separate but intimately related aspects. First is the political objective of the war. Second is the military objective. The CMC determines the war's political objective. The military region commanders' objective is to defeat the enemy in their theaters of war. In Mao's terms, the military objective of war is to deprive the enemy of his will to resist.²⁸ According to the Academy of Military Science, "a campaign is a series of operational activities carried out by a group army level element of the armed forces under unified command according to a unified plan to achieve the local or overall objectives of war,"²⁹ and "combat is organized operational activity carried out in a short period of time in a relatively small space by *budui* and *fendui* elements of the armed forces."³⁰ Combat is normally part of a campaign, and can sometimes be carried out independently." According to PLA officials, the higher authorities are involved in all three levels of war. While the CMC is responsible for the overall war, it may very well micromanage the campaign down to determining which regiment or battalion will be engaged in combat.³¹

Although PLA Navy and Air Force writings mention the broader PLA doctrine and strategic concepts of people's war, people's war under modern conditions, and people's war under modern high-tech conditions, the services tend to focus more on campaign strategy, campaign tactics, and tactical training. As an arm of the PLA, the PLAAF has traditionally conducted its combat operations as a series of subordinate campaigns within the PLA's overall campaign. The PLAAF describes a campaign as "using from one to several aviation, air defense, or airborne units to carry out a series of combined battles according to a general battle plan to achieve a specified strategic or campaign objective in a specified time."³² During 1997, the PLAAF's commander, Liu Shun Yao, stated, "The PLAAF must improve its capabilities in actual combat by highlighting campaign and

²⁷ Mao Zedong (Mao Tse-tung), "On Protracted War," (May 1938), *Selected Military Writings of Mao Tsetung*, Beijing: Foreign Languages Press, 1967, pp. 226-228 and 229-231.

²⁸ Ibid, p. 230.

²⁹ According to the Academy of Military Science, a campaign is a series of operational activities carried out by a *juntuan* level element of the armed forces under unified command according to a unified plan to achieve the local or overall objectives of war. *Zhongguo junshi baike quanshu*, p. 748.

³⁰ According to the Academy of Military Science, combat is organized operational activity carried out in a short period of time in a relatively small space by *bingtuan*, *budui*, and *fendui* elements of the armed forces. Combat is normally part of a campaign, and can sometimes be carried out independently. Ibid., p.690.

³¹ Interview.

³² *Zhongguo junshi baike quanshu*, 312-331, and Teng and Jiang, p. 152.

tactical training. He emphasized that campaign training involves air deterrence, air interdiction, air strikes, and participation in joint exercises.”³³

ORIGINS OF THE RED ARMY

Agrarian Revolutionary War Period (1927-1937)

When the Red Army began in 1927, it was called the Workers' and Peasants' Red Army (*gongnong hongjun*, but was still a mix of many different groups under a common name.³⁴ At that time, the Red Army began organizing its forces into the 4th and 5th corps (*jun*),³⁵ each of which had subordinate divisions, regiments, and battalions.³⁶ The Academy of Military Science (AMS) defines a corps as an operational and tactical *bingtuan* composed of three divisions or brigades.³⁷ This was a logical structure, since the corps had been the basic operational unit within China for 2,000 years. Although the Red Army was based on corps, the organizational structure and designation for the corps have differed over time.

Below the corps level, the division and brigade are often considered the first real operational level. Over the years, the brigade structure has changed several times. During the 1930s, brigades were placed between the division and regimental level. In the 1940s, however, brigades were established that were directly subordinate to the columns or corps. As these brigades grew in size, most of them were redesignated as divisions in the late 1940s. Today, there are still some brigades, but they are directly subordinate to the group armies. The structure below the division and brigade level has remained constant since the 1920s, consisting of regiments, battalions, companies, platoons, and squads. For the most part, PLA brigades today consist of battalions rather than regiments, but some independent brigades still have regiments.

³³ Sun Maoqing, “Make Efforts To Build Modernized People's Air Force: Interview With Air Force Commander Lieutenant General Liu Shun Yao,” *Beijing Liaowang*, 14 April 1997, No. 15, pp. 20-21.

³⁴ Wang Zhenxi, pp. 3-8.

³⁵ Between 1927 and 1949, the Red Army and PLA had created a total of seventy corps, but only thirty-five of them existed when the PRC was founded in 1949. Zhao Gongde and Zhang Minjin, ed., *Zhongguo renmin jiefangjun lishishangde qishige jun* [History of the PLA's Seventy Corps], Tianjin: Tianjin People's Press, December 1993.

³⁶ According to former PLAAF commander Wang Hai, Mao Zedong is the one who designated the Red Army's first corps as the 4th corps. There were no 1st through 3rd armies. By doing so, he set a precedent for numbering all succeeding units. For example, the first PLAAF unit was designated the 4th combined brigade instead of the 1st combined brigade. Wang Hai, *Wang Hai Shangjiang: wode zhanda shengya* [General Wang Hai: My Combat Career], Beijing: Zhongyang Wenxian Chubanshe [Central Literature Publishers], February 2000, p. 49.

³⁷ *Zhongguo junshi baike quanshu*, p. 321.

Through its formative years and into the 1950s, the Red Army remained primarily an infantry force.³⁸ However, as it expanded through the 1930s and early 1940s, it began to include small cavalry, artillery, engineering, and signals units. During the second half of the 1940s, the PLA was preponderantly an infantry force, but also had some artillery divisions, armored (*zhanche*) divisions, railway corps (*tiedaobing*) divisions, and engineering regiments. After 1949, the PLA created and increased the number of artillery divisions, tank (*tanke*) divisions, railway corps divisions, engineering regiments, signals regiments, and chemical defense regiments. The PLA's infantry forces also modernized by adding motorized (*motuohua*) infantry divisions and mechanized (*jixiehua*) infantry divisions. As the PLA entered the 1980s, it added advanced tanks, armored vehicles, rockets, missiles, and helicopters to its force.

The 3-3 System

From the beginning, the Red Army tried to systematically structure its forces using the 3-3 system (*sansanzhi*), which, as a general rule, means that each element in the chain of command has three subordinate elements.³⁹ For example, a corps has three divisions or brigades, which in turn have three subordinate regiments each, on down the chain of command. In 1930, the Red Army Congress formalized this structure when it decided that the entire military would be organized into *juntuan*, corps, divisions, regiments, battalions, companies, platoons, and squads.⁴⁰ In November 1948, the PLA underwent a major reorganization and used the 3-3 system as a basis.⁴¹

This system also incorporates a methodology for numbering each unit for the division level and below. For example, the 10th division would have three subordinate regiments numbered the 28th, 29th, and 30th. These designators are derived by multiplying the division by three, then subtracting one and two ($10 \times 3 = 30$, $-1 = 29$, $-2 = 28$). This was not a hard and fast rule, as there were always exceptions, such as having regiments numbered out of sequence or having either two or four subordinate elements, rather than three.

Traces of the 3-3 system are still in effect today.⁴² Within regiments, the 3-3 system for battalions still holds fairly well. Within divisions, however, the 3-3 numbering system for regiments (infantry or armor) is breaking down as some units are deactivated and replaced with regiments preserved from divisions which are being

³⁸ Yao Yanjing, Lai Mingchuan, Wang Yamin, *Junshi zuzhi tizhi yanjiu*, pp. 377, 384.

³⁹ See Ibid., p.377 *Zhongguo renmin jiefang jun da shiji*, 1927-1982, p. 284; Yuan Wei, ed., *zhongguo renmin jiefang jun wu da yezhan budui fazhan shi lue* [History of the People's Liberation Army's Five Field Armies], Beijing: PLA Press, 1987, p.29.

⁴⁰ *Zhongguo junshi baike quanshu*, p.401.

⁴¹ Ibid., p. 330.

⁴² Based on discussions with John Corbett.

disbanded. The 1985 reorganization also brought about big changes for the division numbering system inside the armies (*jituanjun*). Even more drastic has been the conversion of the fourteen army divisions to the People's Armed Police (PAP) and deactivation of three armies and the subsequent reshuffling of their divisions.

Military Unit Cover Designators

Since the 1950s, the PLA has used a series of numerical cover designators (*budui fanhao* or *budui daihao*) to protect the identify of its units, such as the 53010 unit instead of the 41st Group Army.⁴³ These cover designators are used on stationery letterhead, banners, in newspaper and magazine articles, and on signs at the entrance to military facilities. They are commonly called military unit cover designators (MUCD) in the West. According to one longtime analyst, the PLA has changed its MUCDs at least four times since the early 1950s. Two separate sets of four-digit designators were used from the early 1950's to 1975, when a five-digit system was instituted.⁴⁴ The PLA apparently implemented a new five-digit system during October 2000.

Some units also used special designators during the 1960s-1970s. For example, the designators for the PLAAF's 2nd Aviation School, which was located in Changchun, Jilin Province, from 1949-1966 when it moved to Jiajiang, Sichuan Province, were as follows:⁴⁵ Zhujiang Unit (December 1949-1951), 902 Unit (1951-September 1953), 2532 Unit (October 1953-December 1958), no designator (January 1959-November 1960), 2260 Unit (December 1960-June 1962), Air Force (*kongzi*) 017 Unit (July 1962-May 1963), Air Force 507 Unit (June 1963-July 1975), 86162 Unit (August 1975-present). Although the 2nd Aviation School used three-digit Air Force designators from 1962-1975, other PLAAF units, including two of the school's training regiments, used four-digit numbers at the same time.⁴⁶

⁴³ *Kongjun da cidian*, editor, *Kongjun da cidian* [Air Force Dictionary], Shanghai: Shanghai Dictionary Publishing House, September 1996, p. 145.

⁴⁴ The five-digit system was instituted following an expanded meeting of the CMC, which also instituted a 600,000-man reduction in force. Deng Xiaoping had just been rehabilitated and was re-instituted as a Party vice-chairman, Politburo member, CMC vice-chairman, and chief of the general staff. *Zhongguo renmin jiefangjun shi de 70 Nian* [70 Years of the PLA], Beijing: Junshi Kexue [Military Science] Publishers, July 1997, p. 568.

⁴⁵ *Zhongguo renmin jiefangjun kongjun dier hangkong xuexiao jianshi* [Brief History of the PLAAF Second Aviation School], Chengdu: Air Force Second Aviation School, August 1982, p. 43.

⁴⁶ *Ibid*, pp. 37-38. The PLAAF's headquarters issued orders implementing each of these changes.

Expansion in the 1930s

As the Red Army grew, it added five more corps (1st, 6th, 7th, 11th, 12th) in 1930. By the mid-1930s, it had as many as sixty corps composed of infantry troops. Each corps had a total of 1,000-3,000 troops. During the early 1930s, the Red Army reorganized to include larger organizations called *juntuan*.⁴⁷ In 1930, the Red Army established the 1st *Juntuan*, which had three subordinate corps and a total of 20,000 troops. By the mid-1930s, there were nine *juntuan* (1st, 2nd, 3rd, 5th, 6th, 7th, 8th, 9th, 15th) plus several newly-created corps that were not part of any *juntuan*.⁴⁸

As part of its reorganization effort, the Red Army also began consolidating some of its *juntuan* and corps into three front armies (1st, 2nd, 4th) in the early 1930s. These front armies were composed of two or more *juntuan* plus directly subordinate corps.⁴⁹ This structure defined the Red Army's larger organizational structure during the period they were surrounded by Nationalist forces in Jiangxi Province prior to setting out on the Long March. In 1936, most of the *juntuan* were redesignated as corps or divisions.

War of Resistance Period (1937-1945)

Following the Long March and Japan's invasion of China proper in July 1937, the Nationalists and Communists established a united front, whereby the Red Army was reorganized into two primary units. The Eighth Route Army (*balujun*) had three subordinate divisions (115th, 120th, 129th), but did not follow the 3-3 system for the brigades and regiments.⁵⁰ Each division had two subordinate brigades, which in turn had two subordinate regiments as shown in Table 1.4.⁵¹ The TO&E for the division was 15,000 troops. By the mid-1930s, the Nationalist Army had over forty armies (*jituanjun*) composed of numerous corps.⁵² Therefore, when the CCP and KMT formed the united front, the official name for the Eighth Route Army was the 18th *jituanjun*. When the Eighth Route Army was established, the Red Army's front army and *juntuan* disappeared

⁴⁷ According to AMS, a *juntuan* encompasses front armies and armies. The PLA's front armies are considered strategic and operational (*zhanlue zhanyi*) *juntuan*, and armies are considered operational *juntuan*. *Zhongguo junshi baike quanshu*, p. 401.

⁴⁸ *Zhongguo renmin jiefang jun da shiji*, 1927-1982, pp. 120-130.

⁴⁹ The AMS describes a front army (*fangmianjun*) as an organization composed of several armies (*jituanjun*). A front army is subordinate to the supreme command department (*tongshuaibu*) or to a theater of war (*zhanqu*), and is a combined arms strategic and operational *juntuan*.

⁵⁰ *Ibid.*, pp. 125-141. *Zhongguo junshi baike quanshu*, Vol.7, p. 24.

⁵¹ The brigade designators are derived by multiplying the division by three, then subtracting one and two (115 x 3 = 345, -1 = 344, -2 = 343), but the regiment designators are derived by multiplying the brigade by two, then subtracting one (343 x 2 = 686, -1 = 685).

⁵² *Ibid.*, Vol. 2, p. 276.

as organizational entities. However, as noted above, the terms are still referred to in order to depict organizational entities above the army-level today.

Table 1.4 Eighth Route Army Organization in 1937

Division	115 th	120 th	129 th
Brigade	343 rd	358 th	385 th
Regiment	685 th , 686 th	715 th , 716 th	769 th , 770 th
Brigade	344 th	359 th	386 th
Regiment	687 th , 688 th	717 th , 718 th	771 st , 772 nd
Indep Regiment	689 th		
Total Troops	15,500	14,000	13,000

The second Red Army organization formed during the united front was the New Fourth Army (*xinsijun*), which had four subordinate detachments (*zhidui*), with a total of 10,000 troops.⁵³ These detachments were created from the Red Army Guerilla Force (*hongjun youjidui*) that remained in the south during the Long March.⁵⁴ In 1941, the New Fourth Army reorganized its detachments into seven divisions and one independent brigade as shown in Table 1.5.

Table 1.5 New Fourth Army Reorganization in 1941

Division	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
Brigades	1 st , 2 nd , 3 rd	4 th , 5 th , 6 th	7 th , 8 th , 9 th	10 th , 11 th , 12 th	13 th , 14 th , 15 th	16 th , 18 th	9 th

THE PLA EMERGES

War of Liberation Period (1945-1949)

Immediately following Japan's surrender in 1945, the Nationalists and Communists began re-deploying their forces to fight each other in their continuing civil war. Over the next four years, several major events took place. The Red Army was renamed the People's Liberation Army, the Eighth Route Army and New Fourth Army were reorganized into five field armies with subordinate *bingtuan* and corps, and China was organized into several large military regions.

The CMC began using the terms Liberation Army (*jiefangjun*) and People's Liberation Army (*renmin jiefangjun*) as early as 1945 to identify the concept of a single armed forces. These terms, however, were not formally used with unit designations (i.e.

⁵³ Ibid., Vol. 4, p. 27

⁵⁴ Zhongguo renmin jiefang jun da shiji, 1927-1982, pp. 127-185.

the PLA 32nd division) until the CMC issued a general order to this effect on 1 November 1948.

PLA Field Army Reorganization

Between June 1945 and June 1946, the Eighth Route Army and the New Fourth Army combined their forces into twenty-seven field columns (*yezhan zongdui*), which were equal to divisions, plus six field brigades (*yezhan liu*).⁵⁵ In February 1947, the CMC began consolidating the field columns and brigades into five regional field armies (FA). In November 1948, all of the field columns were redesignated as corps⁵⁶ and subordinated under the field armies' seventeen *bingtuan*, which were equivalent in status to an army (*jituanjun*).⁵⁷ By the end of 1949, there was a total of 58 corps, consisting of subordinate divisions, regiments, battalions, companies, platoons, and squads. The PLA also upgraded and changed the name of most of the brigades to divisions, and subordinated them to the corps. By 1950, each *bingtuan* had 2-4 corps.

The *bingtuan* had actually existed since the early days of the Red Army, but it did not become prominent until 1948.⁵⁸ Under the Eighth Route Army in 1937, the Yanan Garrison *bingtuan* had one subordinate brigade and nine regiments. During the late 1940s, the Huabei Field Army (*yezhan bingtuan*) had two subordinate columns (*zongdui*) and two brigades. In 1948, the Huadong Field Army, the Dongbei Field Army, and the Huabei Military Region had eight *bingtuan* composed of several columns, divisions, and brigades.

In February 1949, the PLA, already numbering more than 2.5 million men, underwent another major reorganization whereby four of the field armies were given numerical designators as shown below.⁵⁹ The *Huabei* (North China) field army did not change its name. At that time, each of the field armies consisted of 2-4 *bingtuan*, plus one or more directly subordinate corps.⁶⁰ Initially, the *Huabei* field army consisted primarily of columns and their subordinate brigades, until they were upgraded to corps and divisions, respectively, and placed under three newly-created *bingtuan*. As the PLA

⁵⁵ Ibid., pp. 224-226.

⁵⁶ Some columns were retained as railway, engineering, or special forces units.

⁵⁷ The AMS states that a *bingtuan* encompasses corps, division, and brigade level operational units. A corps is considered an operations and tactical *bingtuan*, a division is a main tactical *bingtuan*, and a brigade is a tactical *bingtuan*. *Zhongguo junshi baike quanshu*, Volume 2-13, 2-276, 7-529.

⁵⁸ Ibid., Vol. 2, p. 13.

⁵⁹ Ibid. 7. The specific provinces covered are shown in Donald P. Whitaker and Rinn-Sup Shinn, editors, *Area Handbook for the People's Republic of China*, Washington, D.C.: The American University, Foreign Area Studies, 1972, p. 13; and Yuan Wei, ed., *Wu da yezhan*.

⁶⁰ *Zhongguo renmin jiefang jun da shiji, 1927-1982*, pp. 292-294.

consolidated its territorial gains, units within the field armies were often resubordinated to one of the other field armies. Following the founding of the PRC, the *bingtuan* organizational structure was gradually abolished, leaving the corps as the largest unit below a military region. Although the term *bingtuan* was discontinued, it is still used to depict a particular organizational level within the PLA.

- The Xibei (Northwestern) FA, established in 1947 under the command of Peng Dehuai, was renamed the First FA;
- The Zhongyuan (Central Plains) FA, established in 1947 with Liu Bochong as the commander and Deng Xiaoping as political commissar, was renamed the Second FA;
- The Huadong (East China) FA, established in 1947 under the command of Chen Yi, was renamed the Third FA;
- The Dongbei (Northeast) FA, established in 1947 under the command of Lin Biao, was renamed the Fourth FA; and
- The Huabei (North China) FA was formed in May 1948. In February 1949, all of the existing units were upgraded and renamed. The three existing *bingtuan* were renamed and subordinated to the CMC; almost all of the columns were renamed as corps and subordinated to the *bingtuan*; and all of the brigades were renamed as divisions and subordinated to the corps.

Table 1.6 shows the five field armies plus their subordinate *bingtuan*, corps, and divisions at the beginning of 1949.⁶¹ As can be seen, the PLA used the 3-3 numbering system to designate the divisions. As usual, there were exceptions, whereby a few of the corps had four divisions.

Table 1.6 1949 Field Army Units

Field Army	Bingtuan	Corps (Division)	Corps (Division)	Corps (Division)	Corps (Division)
1 st	1 st	1st (1,2,3)	2nd (4,5,6)	7th (19,20, 21)	
	2 nd	3rd (7,8,9)	4th (10,11,12)	6th (16,17, 18)	
2 nd	3 rd	10th (28,29,30)	11th (31,32,33)	12th (34,35,36)	
	4 th	13th (37,38,39)	14th (40,41,42)	15th (43,44,45)	
	5 th	16th (46,47,48)	17th (49,50,51)	18th (52,53,54)	
3 rd	7 th	21st (61,62,63)	22nd (64,65,66)	23rd (67,68,69)	35 th (103,104,105)
	8 th	24th (70,71,72)	25th (73,74,75)	26th (76,77,78)	34th (100,101,102)
	9 th	20th (58,59,60)	27th (79,80,81)	30th (88,89,90)	33rd (97,98,99)

⁶¹ Ibid., pp 292-294; and Yuan Wei, ed., multiple sections.

	10 th	28th (82,83,84)	29th (85,86,87)	31st (91, 92,93)	32nd (94,95)
4 th	12 th	40th (118,119,120)	45th (133,134,135)	46th (136,137,138)	
	13 th	38th (112,113,114, 151)	47th (139,140,141, 160)	49th (145,146,147, 162)	
	14 th	39th (115,116,117)	41st (121,122,123, 1154)	42nd (124,125,126, 155)	
	15 th	43rd (127,128,129, 156)	44th (130,131,132, 157)	48th (142,143,144, 161)	
Huabei	18 th	60th (178,179,180)	61st (181,182,183)	62nd (184,185,186)	
	19 th	63rd (187,188,189)	64th (190,191,192)	65th (193,194,195)	
	20 th	66th (196,197,198)	67th (199,200)	68th (202,203,204)	
	Dir Subor	69th (205,206,207)	70th (209,210)		

1948 Military Region Reorganization

As part of the November 1948 reorganization, the CMC also established four levels of military regions (MR): first-level (*yiji or da junqu*); second-level (*erji junqu*) which are sometimes referred to as military districts (MD/*sheng junqu*); third-level (*sanji junqu*); and subdistrict (*junfenqu*).⁶² There were literally tens of military regions, each of which was associated with a specific field army and its subordinate *bingtuan* and corps. While some of the existing MRs covered several provinces, some provinces were divided into two or more MRs. For example, the Second Field Army had three subordinate *bingtuan* and as many as seven military regions. Today, the PLA has four levels, including the military regions, military districts at the corps level, subdistricts at the division level, and the county armed police troop (*xian wuzhuang budui*) at the regiment level.⁶³ The five first-level MRs and their commanders in 1948 were as follows:⁶⁴

- *Zhongyuan* (Central Plain) MR under the command of Liu Bocheng. This MR was later renamed the Zhongnan (Central South) MR and covered Henan, Hubei, Hunan, Guangdong, and Guangxi;

⁶² Zhongguo renmin jiefang jun da shiji, 1927-1982, pp. 284-285

⁶³ Interview with PLA officials.

⁶⁴ Ibid., pp. 284-285, 294; and Wang Zhenxi, ed., *Shijie junshi nianjian*, p. 7. The headquarters locations were not identified. In addition, the protocol order of the MRs was not consistent within the various articles.

- *Huadong* (East China) MR under the command of Chen Yi covered Shandong, Jiangxi, Jiangsu, Anhui, Zhejiang, and Fujian;
- *Dongbei* (Northeast) MR under the command of Gao Gang covered Heilongjiang, Jilin, and Liaoning;
- *Huabei* (North China) MR under the command of Nie Rongzhen covered Hebei and Shanxi; and
- *Xibei* (Northwest) MR under the command of He Long included Shaanxi, Gansu, Ningxia, Qinghai, and Xinjiang.

As the PLA prepared to move into Tibet in February 1950, the CMC established its sixth MR, designated the Southwest (*Xinan*) MR, with He Long as the commander and Deng Xiaoping as the political commissar.⁶⁵ This MR included Sichuan, Yunnan, Guizhou, and Tibet.

1955-1985 Military Reorganizations

During 1949 and the early 1950s, the Soviet Union had a major influence on the PLA's organization. Based on the Soviet model, the PRC's 1954 Constitution established the National Defense Council and the Ministry of National Defense.⁶⁶ The PLA also implemented some major organizational restructuring in 1955.

The CMC began abolishing the *bingtuan* and column organizational levels in February 1952; however, some engineering units are still designated as columns but are no longer at the corps level.⁶⁷ Each of the corps that were subordinate to the various *bingtuan* were either abolished or resubordinated to the military region commanders. The process was apparently completed during the 1955 reorganization, which left the PLA with thirty-five infantry corps.⁶⁸

⁶⁵ Zhongguo renmin jiefang jun da shiji, 1927-1982, pp. 311-312.

⁶⁶ Frederic H. Chaffee, ed., "Area Handbook for Communist China," Washington, D.C.: The American University, Foreign Area Studies, 1967, p. 614. According to Dr. Harlan Jencks, there have been eight Defense Ministers since the 1954 Constitution established the Ministry of Defense: Peng Dehuai (Sep 1954-Aug 1959), Lin Biao (Aug 1959-Sep 1971), position vacant (Sep 1971-Jan 1975), Ye Jianying (Jan 1975-Mar 1978), Xu Xiangqian (Mar 1978-Mar 1981), Geng Biao (Mar 1981-Nov 1982), Zhang Aiping (Nov 1982-Apr 1988), Qin Jiwei (Apr 1988-Mar 1993), Chi Haotian (Mar 1993-Present). See Kenneth Allen and Eric McVadon, *China's Foreign Military Relations*, Washington D.C.: The Henry L. Stimson Center, October 1999, pp. 12-13, for further information on the Ministry of National Defense.

⁶⁷ Zhongguo Renmin Jiefang Jun da shiji 1927-1982, p. 333; Yuan Wei, ed., *Wu Da Yezhan*, p. 284. According to one PLA officer, some units were still designated as a *bingtuan* into the mid-1990s, at which time the term was abolished.

⁶⁸ Michael D. Swaine, *The Military & Political Succession in China: Leadership, Institutions, Beliefs*, Santa Monica: RAND, 1992, p. 243.

In February 1955, the CMC renamed and reorganized the PLA's six MRs into the following twelve MRs for ground operations: Shenyang, Beijing, Jinan, Nanjing, Guangzhou, Wuhan, Chengdu, Kunming, Lanzhou, Xinjiang, Nei Menggu (Inner Mongolia), Xizang (Tibet).⁶⁹ The PLA also established six air regions for air defense and three naval districts to control fleet operations in the Yellow Sea, East China Sea, and South China Sea.⁷⁰

In 1956, the Fuzhou MR was established in preparation for operations against the Nationalist forces on Taiwan and became the thirteenth MR.⁷¹ In May 1967, the Nei Menggu MR was downgraded to a provincial military district (*sheng junqu*) and subordinated to the Beijing MR. In December 1969, the Xizang MR was downgraded to a provincial military district and subordinated to the Chengdu MR.

As a result of these changes, when the 1970s began, the existing eleven MRs were Shenyang, Beijing, Jinan, Nanjing, Guangzhou, Wuhan, Chengdu, Kunming, Lanzhou, Xinjiang, and Fuzhou.⁷² The Xinjiang MR was renamed the Wulumuqi MR in May 1979.⁷³

Finally, in 1985, China further consolidated its eleven MRs into seven as shown in Table 1.7, and reorganized the remaining corps into armies (*jituanjun*).⁷⁴ Eight of the original eleven MRs were merged into four – Chengdu, Jinan, Lanzhou, and Nanjing –

⁶⁹ Zhongguo renmin jiefang jun da shiji, 1927-1982, pp. 346-347.

⁷⁰ Chaffee, p. 614. Unfortunately, Chaffee does not list the nine air regions, since other sources cited in this paper indicate that only six MRAFs were established in 1955. He could have been referring to air corps or command posts that were established to control areas not covered by the six MRAFs. The three fleet headquarters were designated the North Sea, East Sea, and South Sea Fleets.

⁷¹ Zhongguo Renmin Jiefang Jun da shiji, 1927-1982, pp. 346-347.

⁷² Donald P. Whitaker and Rinn-Sup Shinn, eds., *Area Handbook for the People's Republic of China*, Washington, D.C.: The American University, Foreign Area Studies, 1972, p. 621; *Handbook of the Chinese People's Liberation Army*, Washington, D.C.: Defense Intelligence Agency, DDB-2680-32-84, November 1984, pp. 19-20; and *Zhongguo renmin jiefang jun da shiji, 1927-1982* [People's Liberation Army Chronicle 1927-1982], Beijing: PLA Academy of Military Science, November 1983, pp. 346-347.

⁷³ Zhongguo Renmin Jiefang Jun da shiji 1927-1982, 346-347.

⁷⁴ This MR reorganization included cutting the MR headquarters staffs by fifty percent. See *Zhongguo Renmin Jiefangjun shi de 70 nian*, p. 623.

and three key MRs – Beijing, Shenyang, and Guangzhou – remained intact.⁷⁵ This structure remains today.⁷⁶

Table 1.7 Military Regions and Military Districts

Military Region	Military District
Shenyang	Liaoning, Jilin, Heilongjiang
Beijing	Hebei, Shanxi, Nei Menggu
Lanzhou	Gansu, Shaanxi, Xinjiang, Ningxia, Qinghai
Jinan	Shandong, Henan
Nanjing	Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi
Guangzhou	Guangdong, Guangxi, Hunan, Hubei, Hainan
Chengdu	Yunnan, Xizang, Guizhou, Sichuan

In addition to the military districts, there are several garrisons that are equivalent to military districts. These include the Beijing, Tianjin, Shanghai, and Chongqing Garrisons.

From the mid-1950s to early 1980s, the corps remained the largest ground force organization. In 1983, the PLA began reorganizing its ground fighting forces from an infantry-heavy field army structure to corps-size units called *jituanjun*, which the US government refers to as group armies. The Academy of Military Science translates a *jituanjun* as an army and defines it as a main campaign (*jiben zhanyi*) *juntuan* that is composed of several corps or divisions.⁷⁷

⁷⁵ Robert L. Worden, Andrea Matles Savada, and Ronald E. Dolan, eds., "China: A Country Study: 1987," Washington, D.C.: Library of Congress, Foreign Research Division, 1987, p. 561.

⁷⁶ According to the 1985 issue of *Shijie Junshi Nianjian* [World Military Yearbook], the protocol order for the seven MRs is Beijing, Shenyang, Guangzhou, Nanjing, Jinan, Lanzhou, and Chengdu. However, beginning with the 1987 yearbook and subsequent yearbooks, the order changed to Shenyang, Beijing, Lanzhou, Jinan, Nanjing, Guangzhou, and Chengdu. Unlike PLAAF documents which have remained consistent when listing its MRAFs (see Wang Hai, *Wang Hai Shangjiang: Wode Zhandou Shengya* [General Wang Hai: My Combat Career], Beijing, Zhongyang Wenxian Chubanshe [Central Literature Publishers], February 2000, p. 300), it is not clear why the PLA was not consistent in its MR order until 1987. According to Srikanth Kondapalli, *China's Military: The PLA in Transition*, Delhi: Knowledge World, April 1999, p. 32, the seven military regions cover the following provinces: Shenyang (Liaoning, Jilin, Heilongjiang), Beijing (Hebei, Shanxi, Inner Mongolia), Lanzhou (Gansu, Shaanxi, Xinjiang), Jinan (Shandong, Henan), Nanjing (Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi), Guangzhou (Guangdong, Guangxi, Hunan, Hubei, Hainan), and Chengdu (Yunnan, Tibet).

⁷⁷ Zhongguo junshi baike quanshu, p. 275.

Generally, the PLA's *jituanjun* combine several infantry divisions with armor divisions or brigades, as well as artillery, engineering, anti-aircraft, signals and other specialty forces into an integrated, combined arms fighting force. As explained in Dennis Blasko's chapter on PLA ground forces, by 1988, the former thirty-five infantry corps had been consolidated into twenty-four *jituanjun*. During the 500,000 man reduction from 1996 to 2000, three *jituanjun* headquarters were eliminated, leaving only twenty-one today.

PLA NAVY

The PLA Navy (PLAN) celebrates 23 April 1949 as the day of its founding.⁷⁸ On that date, the CMC created the Northeast China Military Region Navy headquarters (*Huadong junqu haijun*) in Taizhou, Jiangsu Province.⁷⁹ However, PLAN headquarters in Beijing was not established until April 1950.

PLAN Administrative Structure

When PLAN headquarters was established in Beijing, it had three first-level departments – Headquarters Department, Political Department, and Logistics Department. In April 1952, Naval Aviation was added as a fourth first-level department.

During the 1950s, the PLAN also formed various other first-level departments, but they were eventually abolished or merged with other departments. These included the Engineering Department (*haijun gongchengbu*), Health Department (*weishengbu*), and the Ship Building Department (*jianchuan zaobu*) which changed its name to the Ship Repair and Building Department (*jianchuan xiuzaobu*).

In early 1961, the PLAN began reorganizing its equipment leadership and organizational structure in order to overcome various repair and maintenance problems. The Ship Repair and Building Department became the Equipment, Procurement, and Production Supervision Department (*haijun zhuangbei dinghuo jianzaobu*), and the Logistics Department's second-level Armament Department (*houqinbu junxiebu*) became the Equipment Repair Department (*zhuangbei xiulibu*). In 1963, they were reorganized again and the Equipment, Procurement, and Production Supervision Department, the Equipment Repair Department, and the Technical Department (*jishubu*) were united and became the Equipment Department (*haijun zhuangbeibu*).

In 1974 following the excesses of the Cultural Revolution, the Equipment and Technical Department (*zhuangbei jishubu*) was formed to supervise equipment R&D, building inspection, and repair. In 1985, the Navy reorganized and re-established the Equipment Repair Department, incorporating weapon systems, communications, radar,

⁷⁸ "Performance Marks Navy's 50th Anniversary," *Xinhua*, 27 April 1999.

⁷⁹ Unless specified, information in this section about the history of the CMC and general departments comes from *Zhongguo junshi baike quanshu*, Volume 9, pp. 1572-1573; and *Dangdai Zhongguo haijun* [China Today: Navy], Beijing: China Social Sciences Press, 1987, pp. 15-20.

sonar, navigation support equipment, and defense rescue equipment. Following the establishment of the General Equipment Department in 1998, the PLAN combined the Equipment Repair Department with the Equipment Technical Department into the Equipment Department (*zhuangbeibu*).⁸⁰ Therefore, the PLAN's current organization includes four departments – Headquarters, Political, Logistics, and Equipment.

PLAN Operational Structure

The PLAN operates out of three fleet headquarters – North Sea at Qingdao, East Sea at Ningbo, and South Sea at Zhanjiang – which are considered as operational (*zhanyi*) *juntuan*. These fleets were originally established under the existing military regions in 1949-1950. In the late 1980s, the fleet commanders also became deputy commanders of the Jinan, Nanjing, and Guangzhou military regions, respectively.

The PLAN's fleet system is organized into three levels: *zhidui* (division equivalent), *dadui* (regiment equivalent), and *jianting* (single ship).⁸¹ Like the Air Force, Naval Aviation is organized into divisions, regiments, groups, and squadrons. Similar to the Army, the PLAN's artillery is organized into regiments, battalions, companies, platoons, and squads. The PLAN's logistics system is organized into four levels: Navy Headquarters (*haijun*), fleet headquarters (*jiandui*), base (*jidi*), and ship (*jianting*).⁸²

In April 1949, the CMC created the East China MR Navy Headquarters (*huadong junqu haijun*) in Taizhou, Jiangsu Province. In October 1955, the name was changed to the PLA Navy East Sea Fleet (*donghai jiandui*). At some point thereafter, the headquarters moved to Ningbo.

In September 1950, the Navy established a base at Qingdao with Soviet assistance, using the PLA's 11th corps as the foundation. In May 1960, the Ministry of National Defense formally created the North Sea Fleet (*beihai jiandui*) with its headquarters at Qingdao.

In December 1950, the Central China MR Navy Headquarters (*huazhong junqu haijun*) was established in Guangzhou, incorporating former Nationalist naval forces. The name was changed to the PLA Navy South Sea Fleet (*nanhai jiandui*) in October 1955. Sometime thereafter, the headquarters moved to Zhanjiang.

PLA AIR FORCE

PLAAF Administrative Structure

The PLAAF's organizational system includes the administrative structure (*lingdao zhihui jiguan*), five operational branches/service arms (*bingzhong*), specialized support units (*zhuanye baozhang budui*), and logistics and maintenance support units (*houqin*

⁸⁰ *Shijie junshi nianjian* [World Military Yearbook], PLA Press, Beijing, 1999.

⁸¹ *Dangdai Zhongguo haijun*, p. 100.

⁸² *Dangdai Zhongguo haijun*, p. 126.

jishu baozhang budui),⁸³ plus academies/schools (*xueyuan/xuexiao*), and research institutes (*yanjiusuo*). There are also maintenance and logistics support units such as repair facilities (*xiulichang*), hospitals (*yi yuan*), and sanitoriums (*liaoyangyuan*). In addition, there are various types of training regiments (*xunlian tuan*) and training groups (*xunlian dadui*) that are directly subordinate to either Headquarters Air Force or to the seven Military Region Air Force Headquarters.

Since its founding in November 1949, the PLAAF's chain-of-command has basically been organized into four administrative and operational levels: Headquarters Air Force (HqAF/*kongjun*); military region air forces (MRAF/*junqu kongjun*); air corps (*jun*), command posts (*zhihuisuo*), and bases (*jidi*); and operational units (*budui*). Depending on the type of unit, operational units are organized into divisions (*shi*), brigades (*li*), regiments (*tuan*), groups (*dadui*), squadrons (*zhongdui*), battalions (*ying*), companies (*lian*), platoons (*pai*), squads (*ban*), and flights (*fendui*). Operational units can be directly subordinate to HqAF, the MRAF headquarters, an air corps, a command post, or a base.⁸⁴

Over the past fifty years, the overall administrative organization at PLAAF headquarters can be compared to a deck of cards that occasionally gets reshuffled.⁸⁵ Almost no new cards have been added and the existing cards have merely been moved to a different location in the deck, where the offices still retain the same responsibilities. Headquarters Air Force, located in Beijing, is equivalent to the US Air Force's Air Staff and is organized into four first-level (*yiji*) or major (*da*) administrative departments (*bu*) – Headquarters Department (*silingbu/kongsi*), Political Department (*zhengzhibu/kongzheng*), Logistics Department (*houqinbu/konghou*), and Equipment Department (*zhuangbeibu/kongzhuang*) – and their subordinate second-level (*erji*) functional (*yewu*) departments (*bu*), bureaus (*ju*), divisions (*chu*), offices (*ke*), sections (*zu*), and branches

⁸³ The PLAAF identifies the following as specialized support units: radar, communications, chemical defense, reconnaissance, and electronic countermeasures troops. Xin Ming, ed., *Zhongguo renmin jiefangjun kongjun shouce* [People's Liberation Army Air Force Handbook], Qingdao: Qingdao Publishers, June 1991, p. 97.

⁸⁴ In the PLAAF, aviation units are organized into air divisions, regiments, groups, and squadrons, and aviation maintenance units are organized into groups, squadrons, and flights. The air defense and support units are organized into divisions, brigades, regiments, battalions, companies, platoons, and squads. A command post/base is slightly lower than an air corps (the commander is equal to a deputy corps commander); a brigade is slightly lower than a division (the brigade commander is equal to a deputy division commander); a battalion and aviation group are equal; a company and aviation squadron are equal; and a platoon and flight are equal. See Xin Ming, pp. 97-98.

⁸⁵ For example, over the years, the training department and schools department have been first level departments, have merged, and have been separated several times, but their functions have not changed.

(gu).⁸⁶ Historically, the Headquarters, Political, and Logistics Departments have always existed as first-level departments, while other departments have moved between being first-level and second-level departments. These three departments are virtual mirror images of the PLA's three general departments (GSD, GPD, and GLD).

In May 1976, the Aeronautical Engineering Department (*hangkong gongchengbu/konggong*), which had been downgraded to a second-level department in 1969, was re-established as the fourth first-level department, and changed its name to the Equipment-Technical Department (*kongjun zhuangbei jishubu*) in November 1992.⁸⁷ Following the April 1998 creation of the General Equipment Department, the PLAAF changed the name of the Equipment-Technical Department to the Equipment Department (*kongjun zhuangbeibu/kongzhuang*).⁸⁸

PLAAF Operational Structure

Although the PLAAF is subordinate to the PLA, the uneven growth of the Air Force led to operational areas that were sometimes different than those of the ground forces. This situation lasted until the 1985 military region consolidation mentioned above, when the PLAAF operational boundaries were finally matched to those of the ground forces. While most of the PLAAF's aviation and air defense units are subordinate to an MRAF, air corps, command post, or base, some of the PLAAF's aviation and air defense units are directly subordinate (*zhishu budui*) to PLAAF Headquarters.

Between August 1950 and May 1952, the six PLAAF Aviation Divisions (*kongjun hangkongchu*) that had been created in the six ground force MRs became MRAF headquarters.⁸⁹ The six MRAFs and their locations are shown below:⁹⁰

- Dongbei – Shenyang
- Huabei – Beijing
- Xibei – Lanzhou
- Huadong – Nanjing

- Zhongnan – Wuhan (moved to Guangzhou in May 1955)
- Xinan – Chongqing (moved to Chengdu in 1950 and Wuhan in May 1955)

⁸⁶ In most cases in the PLAAF, the term *jishu*, normally translated as “technical” refers to maintenance, but the meaning is generally clear from the context. For example, the PLAAF's *jishu budui* are maintenance troops for equipment and weapons systems other than aircraft.

⁸⁷ Kongjun da cidian, ed., Kongjun da cidian, p. 146.

⁸⁸ Shijie Junshi Nianjian, 1999, p. 103.

⁸⁹ Lin Hu, ed., *Kongjun shi* [History of the Air Force], Beijing: PLA Press, PLAAF Headquarters Education and Research Office, November 1989, pp. 26-27.

⁹⁰ Yao Jun, ed., *Zhongguo hangkong shi* [A History of China's Aviation], Zhengzhou: Dajia Publishers, September 1998, p. 656; and Lin Hu, pp. 26-27.

Although the CMC realigned the ground force operational boundaries into twelve MRs in February 1955, the PLAAF did not follow suit. In May 1955, the six MRAFs were renamed. While four of the MRAF headquarters remained in the same location, two of them moved. The *Zhongnan* MRAF in Wuhan moved to Guangzhou as the Guangzhou MRAF, and the *Xinan* MRAF in Chengdu moved to Wuhan to become the Wuhan MRAF. The MRAF headquarters changes in May 1955 are shown below:

- Dongbei MRAF
- Shenyang MRAF
- Huabei MRAF
- Beijing MRAF
- Xibei MRAF
- Lanzhou MRAF
- Huadong MRAF
- Nanjing MRAF
- Zhongnan MRAF
- Guangzhou MRAF
- Xinan MRAF
- Wuhan MRAF

During the 1950s and 1960s, the PLAAF created thirteen air corps and several command posts to control aviation and air defense units within geographical areas that may or may not have been within an existing MRAF. During the Cultural Revolution, many PLAAF command organizations ceased to exist and were reestablished during the late 1970s. In addition, as the PLAAF expanded and realigned its operational areas with those of the ground forces, several of the air corps replaced MRAF headquarters, were abolished, or were downgraded to a command post. The key point is that these command organizations are composed of staff members only. When they moved, they did not necessarily have organic aviation and air defense units that moved with them. As these command organizations were moved around to replace existing organizations or establish new command organizations, they then took control of aviation and air defense units that already existed in the command area. Today, only five air corps remain active – 1st/Changchun, 7th/Nanning, 8th/Fuzhou, 9th/Wulumuqi, 10th/Datong. Beginning in 1993, the PLAAF also changed the names of six of its seven existing command posts to bases – Dalian, Tangshan, Xian, Shanghai, Wuhan, and Kunming. Apparently the Lhasa Command Post did not convert to a base.⁹¹

⁹¹ Directory of PRC Military Personalities, October 1999, p. 46.

PLA SECOND ARTILLERY CORPS

Unlike the Navy and Air Force, there is very little substantive information about the organizational structure of the Second Artillery Corps. In December 1957, the PLA's surface-to-surface missile troops (*di di daodan budui*), were established and subordinated to the CMC's artillery troops (*paobing*).⁹² In July 1966, the CMC formally established the Second Artillery Corps (*dier paobing*) headquarters, using the command staff of the former PLA Public Security Force (*gonganjun*) and the artillery troops' surface-to-surface missile troops as the core. The Second Artillery Corps was placed under the direct control of the CMC. In 1967, the missile troops and schools belonging to the artillery troops were transferred to the Second Artillery Corps.

There is very little information available about the administrative structure for the Second Artillery Corps. However, prior to 1998, there were four first-level departments – Headquarters, Political, Logistics, and Technical Equipment (*jishu zhuangbeibu*).⁹³ The latter was responsible for equipment R&D, maintenance, repair, and procurement. Following the creation of the General Equipment Department in 1998, the Technical Equipment Department changed its name to Equipment Department (*zhuangbeibu*).

Today, the Second Artillery Corps, with an estimated 90,000 personnel, consists of headquarters elements, six corps-level launch bases (*jidi*), one engineering design academy, four research institutes, two command academies, and possibly an early warning unit.⁹⁴ As key operational strike units, brigades are likely only assigned one

⁹² Zhongguo junshi baike quanshu, Volume 9, p. 1567.

⁹³ *Shijie junshi nianjian* [World Military Yearbook], PLA Press, Beijing, 1987-1999.

⁹⁴ Mark Stokes, "Weapons of Precise Destruction: PLA Space and Theater Missile Development," *China and Weapons of Mass Destruction: Implications for the United States*, Conference Report, 5 November 1999, pp. 203-205. Bases are located at Shenyang (80301 Unit); Huangshan (80302 Unit); Kunming (80303 Unit); Luoyang (80304 Unit); Huaihua (80305 Unit); and Xining (80306 Unit). The Second Artillery has one engineering design academy and four research institutes to solve problems associated with operations, TELs, and logistics (First Institute), command automation, targeting, and mapping (Third Institute), and missile and warhead engineering design (Academy of Engineering Design). The Second Artillery's Command College in Wuhan prepares officers for leadership positions within headquarters elements and launch brigades. The Engineering College in Xian educates technicians associated with equipment and technology departments at various headquarters and field units. General Second Artillery organizational information is drawn from numerous sources, to include open and internal (*junnei*) Chinese publications and from discussions while assigned as the assistant air attaché in Beijing, China from 1992-1995. Also see *PLA Directory of Personalities*, USDLO Hong Kong, 1996, pp. 48-51; Bill Gertz, "New Chinese Missiles Target All of East Asia," *Washington Times*, 10 July 97, p. 1; Hisashi Fujii, "Facts Concerning China's Nuclear Forces," *Gunji Kenkyu*, November 95, in FBIS-CHI-96-036; "Guangrong Bang" [Outstanding Units], [*Changying*] *Flying Eagle*, 3 November 93; "Guangrong Bang"

type of missile to facilitate command and logistics. The Second Artillery headquarters and subordinate bases oversee warhead and missile storage facilities; maintenance units; and special warhead/missile transportation services.⁹⁵

The unit headquartered in the mountain resort town of Huangshan, Jiangxi province, is the Second Artillery's most important base for conventional long-range precision strikes against Taiwan.⁹⁶ The Huangshan base includes both nuclear and conventionally armed theater missiles. During a wartime situation, multiple conventional brigades would be subsumed into a conventional theater missile *juntuan* consisting of a command post, a logistics command post, and a number of subordinate theater missile brigades each with different types of theater missiles. The *juntuan* command post would largely consist of command authorities from Beijing and Huangshan.⁹⁷

A typical conventional theater missile brigade has a staff consisting of a headquarters, political, logistics, and equipment departments.⁹⁸ Brigade elements include a mobile brigade command post, a central depot (known as a "technical position" or *jishu zhendi*), a transfer point (*zhuanzai changping*), and an assigned set of pre-surveyed launch sites (*fashe zhendi*), as well as a set of reserve (*daiji*) launch sites. A conventional missile brigade also has a set of "equipment support sub-units" (*zhuangbei baozhang fendui*). Brigades have at least four firing battalions (*fasheyings*), with each

[Outstanding Units], *Flying Eagle*, May 1992; Lewis and Xue, p. 213 fn; and *Nuclear Weapons Databook*, Vol. 5, pp. 324-335. Among sources, *Flying Eagle*, one of a handful of Second Artillery-associated publications, is most useful in piecing together the organizational structure. Second Artillery organizational issues are also discussed in author's *Strategic Modernization* monograph.

⁹⁵ "The Strategic Nuclear Force Organization," in *Guojia junzhixue* [The Science of the State Military System], undated, p.3.

⁹⁶ Stokes, pp. 59-61. Prior to the change in MUCDs in October 2000, Huangshan was known as the 80302 unit.

⁹⁷ *Lianhe zhanyi di erpaobing zuozhan*, p. 4. Another article supports the assertion that conventional Second Artillery units would be subsumed into the theater command structure, but notes that Beijing may direct operations through the Second Artillery chain-of-command. See Li Junsheng, "Lianhe zhanyi didi changgui daodan budui zuozhan zhihui wenti tantao" [Inquiry Into Joint Conventional Theater Surface-to-Surface Missile Unit Operational Command Problems], in *Lianhe zhanyi yu junbingzhong zuozhan*, [Joint Theater and Service Operations], Beijing: National Defense University Press, 1998, pp. 228-231. Li is from an unidentified (probably Second Artillery) Third Research Institute.

⁹⁸ Mark Stokes, "Weapons of Precise Destruction: PLA Space and Theater Missile Development," *China and Weapons of Mass Destruction: Implications for the United States*, Conference Report, 5 November 1999, pp. 215-217.

battalion assigned at least three-four companies.⁹⁹ Companies subordinate to the launch battalion likely would be assigned at least one launcher, an electric power generation vehicle, a surveying vehicle, a communications command vehicle, and a missile transport vehicle. Battalions and companies would be assigned a zone within which to operate.¹⁰⁰

PLA ADMINISTRATIVE ORGANIZATION STRUCTURE

PLA Ranks, Rank Categories, and Grades

The Red Army and PLA have always had an officer (cadre) grade and rank system (*ganbu dengji zhidu*), which has evolved over the years. This system consists of four basic components: grade categories, grades, rank categories, and ranks. The Chinese use four terms to describe the components: *zhiwu*, *jibie*, *dengji*, and *junxian*.¹⁰¹ These terms do not always translate directly into English, but their meaning is usually clear from the context. The grade system is based on series of grade categories and a list of specific positions within each grade category. The lowest grade is platoon leader and the highest is chairman of the CMC, with the number of grades in-between changing over time. The PLA's rank system, which existed from 1955-1965 and was re-instituted in 1988, consists of two parts. The first part is the rank categories: flag rank, field grade (major through senior colonel), and company grade officers (second lieutenant through captain). The second part is the ranks themselves (second lieutenant through general).

⁹⁹ For reference to a fourth battalion within a Second Artillery brigade structure, see "*Guangrong Bang*" [Glorious Honor Roll], *Flying Eagle*, 2 November 93, p. 10.

¹⁰⁰ Senior Colonel Wang Benzhi, "Didi changui daodan huoli yunyong de jige wenti," [Some Questions Related to the Use of Conventional Surface-to-Surface Missile Firepower], in *Lianhe zhanyi yu junbingzhong zuozhan*, [Joint Theater and Service Operations], Beijing: National Defense University Press, 1998, pp. 236-241. SrCol Wang is the Chief of Staff of the Second Artillery Huaihua Base (80305 Unit). One source states that an operational zone could be 20-40 square kilometers. It is unclear what echelon would operate in this size zone. See Lu Xiaohong, "Daodan jidong fashe zhuangbei ji dimian shebei weizhuang yu yinshen jishu fenxi," [Analysis of Mobile Missile Launch and Ground Equipment Camouflage and Stealth Technology], in Xu Dazhe, *Guowai dandao daodan jishu yanjiu yu fazhan* [Study and Development of Foreign Ballistic Missile Technology], Beijing: Astronautics Press, October 98, pp. 193-202.

¹⁰¹ *Zhiwu* or *zhiwu dengji* is translated as position or post and indicates the specific position someone holds. *Jibie* is translated as grade. These two terms are used interchangeably and refer to a specific position such as regiment commander. The third term is *dengji*, which means rank, but this term is used more in the sense of an organizational level, such as at the division level, rather than a rank like a colonel. The fourth term is *junxian*, which means the military ranks, such as general, field grade (major through colonel), and company grade (second lieutenant through captain).

Prior to 1952, cadre in the Red Army and PLA were identified only by their position (*zhiwu*). In 1952, the PLA established a formal unified grade system, which consisted of ten grade categories and twenty-one grades (10 *dengji* 21 *jibie*) as shown in Table 1.8.¹⁰² In 1955, the "CMC member" grade category was abolished, leaving nine categories and twenty grades.

Table 1.8 PLA Grades: 1952

Grade Category	Grade
1. CMC (<i>zhongyang junwei</i>)	1. Chairman (<i>zhuxi</i>) & vice chairman (<i>fuzhuxi</i>)
2. Military Region (<i>dajunqu</i>)	2. Commander (<i>silingyuan</i>) & Political Commissar (<i>zhengzhi weiyuan</i>)
3. CMC member (<i>zhongyang junwei weiyuan</i>)	3. Member (<i>weiyuan</i>)
4. <i>Bingtuan</i>	4. Leader (<i>zhengbingtuan</i>) 5. Deputy leader (<i>fubingtuan</i>) 6. #3 leader (<i>zhunbingtuan</i>)
5. Corps (<i>jun</i>)	7. Leader (<i>zhengjun</i>) 8. Deputy Leader (<i>fujun</i>) 9. #3 leader (<i>zhunjun</i>)
6. Division (<i>shi</i>)	10. Leader (<i>zhengzhi</i>) 11. Deputy leader (<i>fushi</i>) 12. #3 leader (<i>zhunshi</i>)
7. Regiment (<i>tuan</i>)	13. Leader (<i>zhengtuan</i>) 14. Deputy leader (<i>futuan</i>) 15. #3 leader (<i>zhuntuan</i>)
8. Battalion (<i>ying</i>)	16. Leader (<i>zhengying</i>) 17. Deputy leader (<i>fuying</i>)
9. Company (<i>lian</i>)	18. Leader (<i>zhenglilian</i>) 19. Deputy Leader (<i>fulian</i>)
10. Platoon (<i>pai</i>)	20. Leader (<i>zhengpai</i>) 21. Deputy leader (<i>fupai</i>)

In 1955, the PLA combined the existing grade system with a new military rank system (*junxian zhidu*) based on the Soviet rank system, which included five rank categories (*dengji*) and fifteen ranks (*jibie*) as shown in Table 1.9.¹⁰³ Each grade was assigned at least one rank.

¹⁰² *Zhongguo junshi baike quanshu*, Volume 4, p. 40.

¹⁰³ *Ibid.*

Table 1.9 PLA Ranks: 1955-1965

Rank Categories	Ranks
1. Generalissimo (<i>dayuanshuai</i>)	1. Generalissimo (<i>dayuanshuai</i>)
2. Marshal (<i>yuanshuai</i>)	2. Marshal (<i>yuanshuai</i>)
3. General Grade (<i>jiangguan</i>)	3. Senior General (<i>dajiang</i>)
	4. General (<i>shangjiang</i>)
	5. Lieutenant General (<i>zhongjiang</i>)
	6. Major General (<i>shaojiang</i>)
4. Field Grade (<i>xiaoguan</i>)	7. Senior Colonel (<i>daxiao</i>)
	8. Colonel (<i>shangxiao</i>)
	9. Lieutenant Colonel (<i>zhongxiao</i>)
	10. Major (<i>shaoxiao</i>)
5. Company Grade (<i>weiguan</i>)	11. Senior Captain (<i>dawei</i>)
	12. Captain (<i>shangwei</i>)
	13. 1 st Lieutenant (<i>zhongwei</i>)
	14. 2 nd Lieutenant (<i>shaowei</i>)
	15. Warrant Office (<i>zhunwei</i>)

In May 1965, the military grade¹⁰⁴ and rank systems were officially abolished and replaced with the State administrative cadre (officer) rank system (*guojia jiguan xingzheng ganbu jibie zhidu*).¹⁰⁵ Officers were called cadre (*ganbu*) and enlisted members were called soldiers (*zhanshi*). All military personnel wore the same hat (Mao hat with a red star) and plain red collar tabs. Each of the three services wore their traditional Army green, Navy blue and white, and Air Force green jackets and blue pants. The only difference between a cadre and soldier was that a cadre's jacket had four pockets and a soldier's had only two breast pockets, and the material was different. In 1972, the twenty-seven cadre ranks were reduced to twenty-three.

During the 1979 Vietnam border conflict, the PLA had major command and control problems when different units had to work together and it was difficult to tell who was in

¹⁰⁴ According to interviews with PLA officials, the military grade system unofficially remained in place. In his autobiography, PLAAF commander General Wang Hai notes that in 1975 he skipped three grades when he was transferred from his position as the PLAAF Headquarters' Training Department's Second Department director, which was a deputy corps leader position, to become the commander of the Guangzhou MRAF, which was a *bingtuan* leader position. Wang Hai, *Wang Hai Shangjiang: wode zhandou shengya* [General Wang Hai: My Combat Career], Beijing: Zhongyang Wenxian Chubanshe [Central Literature Publishers], February 2000, p. 237.

¹⁰⁵ *Zhongguo junshi baike quanshu*, Volume 4-40.

charge. After several years of wrangling, the National People's Congress (NPC) adopted the "Regulations for PLA Officers' Ranks in accordance with relevant provisions of the Military Service Law of the People's Republic of China," effective October 1988. The Regulation established a rank/grade system for three cadre classifications – officers (*junguan*) and non-technical cadre (*fei zhuan ye jishu ganbu*), technical cadre, and civilian cadre (*wenzhi ganbu*) – and abolished the administrative cadre grade system for the military.¹⁰⁶ The description for each rank provides the grade, authorized ranks, and basic rank for each grade. For example, the Regulation stipulates, "Leaders of military regions shall be either general or lieutenant general, with lieutenant general as the basic military rank."

There are fifteen officer grades (*junguan zhiwu dengji*) as shown in Table 1.10, which determine every officer's military rank, pay, and allowances. All PLA officers, regardless of service or duty title, are assigned one of these grades. Military ranks for active duty officers (*xianyi junguan*) were assigned in three levels (general officer, field grade, and company grade) and ten grades (3 *deng* 10 *ji*).

¹⁰⁶ "Regulations for PLA Officers' Ranks," *Xinhua*, 2 July 1988; and *Zhongguo junshi baike quanshu*, Volume 4, p. 392.

Table 1.10 PLA Grade and Rank Structure: 1988

Grade (<i>zhiwu dengji</i>)	Military Rank (<i>junxian</i>)*	Service Limit Age ¹⁰⁷	Army	Navy	Air Force	2 nd Artillery
1. CMC Chm (<i>junwei zhuxi</i>), Vice Chairman (<i>fuzhuxi</i>)	Chairman – None, Vice Chairman – General					
2. CMC Member (<i>junwei weiyuan</i>)	General		General Departments			
3. MR Commander (<i>daqu zhengzhi</i>)	General/Lieutenant General	65	MR/General Department Dep Ldr	HQ	HQ	HQ
4. MR Deputy Commander (<i>daqu fuzhi</i>)	Lieutenant Geneneral/Major General	63		Fleet/Naval Aviation	MRAF	
5. Corps Commander (<i>zhengjun</i>)	MajGen/LtGen	55	Army (<i>jituanjun</i>)/MD	Base/ Fleet Aviation	Air Corps/ Base	
6. Corps Deputy Commander (<i>fujun</i>)	Major General/Senior Colonel	(53)				
7. Division Commander (<i>zhengshi</i>)	Senior Colonel /Major General	50	Division	Garrison/ Flotilla (<i>jiandui</i>)	Division	Base

¹⁰⁷ Officers at the senior grades must retire if they are not promoted to a higher grade. Younger officers who are not promoted must leave the service. The PLA has two types of retirement – *tuixiu* and *tuiyi*. *Tuixiu* means the officer retires with a full pension and does not have to work anymore. *Tuiyi* means the officer has a civilian job after he leaves the military and does not receive a full military pension.

		Colonel /Senior Colonel	(48)	Brigade	zhidui)	Brigade	Brigade
8. Division Deputy Commander (<i>fushi</i>)/Brigade Ldr (<i>zhenglü</i>)		Colonel /Senior Colonel	(48)	Brigade		Brigade	Brigade
9. Regiment Ldr (<i>zhengtuan</i>)/Brigade Dep Ldr (<i>fulü</i>)		Colonel /Lieutenant Colonel	45	Regiment	Group (<i>jianting dadui</i>)	Regiment/ Brigade Dep Ldr	Brigade Dep Ldr
10. Regiment Dep Ldr (<i>futuan</i>)		Lieutenant Colonel /Colonel	(43)				
11. Battalion Commander(<i>zhengying</i>)		Major /Lieutenant Colonel	40	Battalion	Squadron (<i>jianting zhongdui</i>)	Battalion/ Group (<i>dadui</i>)	Battalion
12. Battalion Deputy Commander (<i>fuying</i>)		Captain/Major	(38)				
13. Company Ldr (<i>zhenglían</i>)		Captain/1 st Lieutenant	35	Company		Company/ Squadron (<i>zhongdui</i>)	Company
14. Company Dep Ldr (<i>fulian</i>)		1 st Lieutenant/Captain	(33)				
15. Platoon Leader (<i>zhengpai</i>)		2 nd Lieutenant/1 st Lieutenant	30	Platoon		Platoon/ Flight (<i>fendui</i>)	Platoon

*The first rank noted is the basic rank for that grade. Squad leaders (*banzhang*) are considered enlisted personnel (*zhanshi*). The Military Yearbook did not provide the service limit ages for the deputy leaders for the corps and below, so the figures in parentheses are estimates.

In addition, every PLA organization, whether it is a service, branch, administrative office, or operational unit, is categorized into one of these fifteen grade levels, based upon the leader's grade. For example, the leader of the PLA Navy and Air Force have the grade of a military region leader, therefore the Navy and Air Force as services (*junzhong*) are equal to a military region. Note that the term leader is used since the commander and political commissar at each level are equals and have the same grade, even if they carry different ranks.

The grade structure also provides the foundation for the administrative organization of every unit within the PLA from the highest echelons to the lowest units, whereby all administrative staff elements and positions are classified as one of the fifteen grades. For example, since the directors of the four general departments are all members of the CMC, the four general departments are classified at the CMC member level. Most of their second-level departments are classified at the corps leader level, and the third tier bureaus are at the division leader level. Historically, the GSD and GPD have always been at the CMC member level. However, the director of the GLD has not always been a member of the CMC, so the GLD as an organization has been a half-step below the CMC member and a half-step above a military region leader level.

Prior to 1994, the PLA had mandatory retirement ages for platoon through corps leaders (30 for platoon, 35 for company, 40 for battalion, 45 for regiment, 50 for division, and 55 for corps).¹⁰⁸ It was not until May 1994, however, that mandatory ages were established for military region deputy leaders and leaders (63 and 65, respectively). There are no mandatory retirement ages for CMC members and heads of the four general departments. For example, CMC Vice Chairman Zhang Wannian is 72, Vice Chairman and Minister of Defense Chi Haotian is 71, and CMC member and Chief of the General Staff Fu Quanyou is 70.¹⁰⁹

At that time, the PLA tried its best to provide ranks by balancing between the officer's position and what was correct based on the each officer's longevity and contributions. The PLAAF admitted that it would take 5-10 years to normalize the rank structure, whereby the older cadres would meet their retirement ages and then the commander could be promoted to the proper rank and the new deputies given a lower rank.¹¹⁰ For example, the commander for the 1st Air Division was only 31 years old and given the rank of colonel, while his deputies were older than he was and were given the rank of senior colonel. However, once the deputies reached their retirement age, their replacements were given a lower rank.

¹⁰⁸ *Shijie junshi nianjian* [World Military Yearbook], 1995-1996, p. 76.

¹⁰⁹ *Zhongguo junshi baike quanshu*, Volume 7 and 9.

¹¹⁰ Interviews with PLAAF officials in 1988.

Pay and Allowances: PLA officers receive their salary based on five criteria as shown below.¹¹¹

- Base Salary (*jichu gongzi*): All officers receive the same base salary;
- Grade (*zhiwu gongzi*): This is based on the sixteen grades described above, but each grade also has about eight separate salary levels based on time in grade;
- Rank (*junxian gongzi*): This is based on the officer's rank, which also has about eight separate salary levels based on time in rank;
- Time in Service (*junling gongzi*): This is based on the total time in the PLA; and
- Bonus (*putie*): Each officer receives some type of bonus based on his/her specialty.
- Location: Officers receive different amounts of money depending upon where they are stationed.

CMC and General Departments

The PLA's highest administrative level is the CCP Central Committee's Military Commission. Directly subordinate to CMC are the four general departments – General Staff (GSD), General Political (GPD), General Logistics (GLD), and General Equipment (GED). Between 1949-1958, the PLA had as many as eight general departments subordinate to the CMC, but these were reduced to three in late 1958. This structure remained constant until the GED was added in 1998.

Following the 4th Party Congress in 1925, the CCP Central Committee established a subordinate Military Department (*junshibu*).¹¹² In October 1928, a Military Commission (*junshi weiyuanhui*) was created under the Military Department, along with a staff office (*canmouke*), Organization Office (*zuzhike*), Soldiers Office (*bingshike*), Special Affairs Office (*tewuke*), and Transportation Office (*jiaotongke*) that were also subordinate to the Military Department. In 1930, the Military Department was renamed the CCP Central Committee Military Commission (*zhonggong zhongyang junshi weiyuanhui*) and a Military Commission standing committee was formed with several subordinate elements: Secretariat Division (*mishuchu*), General Political Department (*zongzhengzhibu*), Staff Department (*canmoubu*), Armed Workers And Peasants Department (*wuzhuang gongnongbu*), Military Affairs Department (*junwubu*), Health Management Department (*jingli weishengbu*), Soldier Mobilization Commission (*shibing dongyuan weiyuanhui*), and a Non-CCP Soldier Work Department (*waibing gongzuobu*).

In November 1931, the First Chinese Soviet Congress established the Chinese Soviet Republic Central Revolutionary Military Commission (*zhonghua suweiai*

¹¹¹ Interview with PLA officials. *Zhongguo junshi baike quanshu*, Volume 4-178.

¹¹² Unless specified, information in this section about the history of the CMC and general departments comes from *Zhongguo junshi baike quanshu*, Volume 9, pp. 1585- 1586.

gongheguo zhongyang geming junshi weiyuanhui, shortened to *zhong ge junwei*). Zhu De was the chairman and there were 14 others were vice-chairmen.¹¹³ The Military Commission was organized into a General Staff Department (*zongcanmoubu*), General Political Department, General Administration Department (*zongjinglibu*) which changed to the General Supply Department (*zonggongjibu*), General Health Department (*zongweishengbu*), General Depot and Transportation Department (*zongbingzhan yunshubu*), and a Rear Services General Office (*houfang bangongshi*). Ye Jianying was the Chief of the General Staff. In 1934, the General Mobilization Armed Force Department (*zongdongyuan wuzhuangbu*) and the Political Security Bureau (*zhengzhi baoweiju*) were added.

During the Long March, several different command organizations were formed in conjunction with the movement of the three front armies. In October 1936, a new Central Revolutionary Military Commission was established in Yanan. The Chinese Workers' and Peasants' Red Army General Department that was created during the Long March changed its name to the Chinese People's Anti-Japanese Red Army General Department, which had a subordinate General Headquarters (*zongsilingbu*). At that time, the General Headquarters changed its name to the GSD, and was organized into several subordinate elements: four subordinate bureaus (*ju*) numbered 1st through the 4th; the GPD with a subordinate Organization Department, Propaganda Department (*xuanchuanbu*), Local Works Department (*difangbu*), Security Department (*baoweibu*), and Anti-Japanese Battlefront Department (*kangri zhanxianbu*); and Rear Services Department (*houfang qinwubu*).

When the CCP and KMT formed a united front against Japan in July 1937, the Red Army's Eighth Route Army and New Fourth Army were merged into the National Revolutionary Army (*guomin gemingjun*), but were placed under the direct control of the CCP's Central Committee Revolutionary Military Commission. Under the Military Commission were the GSD with its subordinate 1st through 4th Bureaus, plus the Supply Department, Health Department, and Depot Department; and the GPD with its Organization Department, Propaganda Department, Counterintelligence Department (*chujianbu*), and Enemy Works Department (*digongbu*).

In August 1938, the Supply Department and Health Department were taken out from under the GSD and placed directly under the Military Commission. In July 1939, the Military Commission reestablished the first-level Rear Services Department and placed the Supply Department and Health Department, along with a Political Department as second-level departments.

After the 7th Party Congress established a new Central Committee Military Commission in August 1945, the Military Commission had a General Staff Department, General Political Department, and General Rear Services Department.

In October 1949, the People's Revolutionary Military Commission (*renmin geming junshi weiyuanhui*) was established with Mao as the chairman. Zhu De, Liu Shaoqi, Zhou Enlai, Peng Dehuai, and Cheng Qian were vice-chairmen, and there were twenty-two other members.

¹¹³ *Zhongguo renmin jiefang jun da shiji*, 1927-1982, pp. 64-65.

Between October 1949 and mid-1957, the Military Commission created a total of eight directly subordinate general departments and their second-level departments and bureaus shown below:

- **General Staff Department:** Operations Department (*zuozhanbu*), Intelligence Department (*qingbaobu*), Technical Department (*jishubu*), Communications Department (*tongxinbu*), Military Affairs Department (*junwubu*), Equipment Planning Department (*zhuangbei jihuabu*), People's Armed Forces Department (*renmin wuzhuangbu*), Military Transportation Headquarters (*junshi yunshu silingbu*), Political Department (*zhengzhibu*), Cadre Division (*ganbuchu*), Cartography Bureau (*cehuiju*), and the Administration and Economic Management Department (*xingzheng jingji guanlibu*);
- **Training Inspector General Department** (*xunlian zongjianbu*): Planning and Inspection Department (*jihua jianchabu*), Army Combat Training Department (*lujun zhandou xunlianbu*), Military Academies and School Department (*junshi xueyuan he xuexiaobu*), Military Science and Regulations Department (*junshi kexue he tiaolingbu*), Outside Military Training Department (*junwai xunlianbu*), Physical Training Bureau (*tiyu xunlianju*), and Combat Training Material Support Bureau (*zhandou xunlian wuzhi baozhangju*);
- **Armed Forces Inspection Department** (*wuzhuang lilianbu*): Army Inspection Department (*lujun jianchabu*), Air Force Inspection Department (*kongjun jianchabu*), Navy Inspection Department (*haijun jianchabu*), and Logistics Finance Inspection Department (*houqin caiwu jianchabu*);
- **General Political Department:** Organization Department (*zuzhibu*), Cadre Department (*ganbubu*), Propaganda Department (*xuanchuanbu*), Security Department (*baowei*), Culture Department (*wenhuabu*), Youth Department (*qingnianbu*), Liaison Department (*lianluobu*), and Secretariat Division (*mishuchu*);
- **General Cadre Department** (*zongganbubu*): General Branch Cadre Appointment and Removal Department (*yiban bingzhong ganbu renmianbu*), Special Branch Cadre Appointment and Removal Department (*tezhongbing ganbu renmianbu*), Organization Statistics Department (*zuzhi tongjibu*), Military Ranks Award Department (*junxian jianglibu*), and Reserve Forces Cadre Mobilization Department (*yubeiyi ganbu dongyuanbu*);
- **General Logistics Department:** Headquarters Department (*silingbu*), Political Department (*zhengzhibu*), Cadre Department (*ganbubu*), Quartermaster Production Department (*junxu shengchanbu*), Health Department (*weishengbu*), Barracks Management Department (*yingfang guanlibu*), Fuels Department (*youliaobu*), Training Department (*xunlianbu*), Vehicle Management Department (*cheguanbu*), Horse Administration Bureau (*mazhengju*), and Veterinary Bureau (*shouyiju*);
- **General Finance Department** (*zongcaiwubu*): Organization Planning Bureau (*zuzhi jihuaaju*), Budget Finance Bureau (*yusuan caiwuju*), Labor Salary Bureau (*laodong gongziju*), Engineering Construction Funding Bureau (*gongcheng jianzhu jingfeiju*), Factory Warehouse Funding Bureau (*gongchang cangk*

jingfeiju), Accounting Bureau (*kuaijiju*), and Foreign Exchange Bureau (*waihuiju*); and

- **General Armament Department** (*zongjunxiebu*): Organization Planning Bureau (*zuzhi jihua ju*), Weapons Supply Bureau (*wuqi gongjiju*), Ammunition Supply Bureau (*danyao gongjiju*), Basic Construction Bureau (*jiben jianshe ju*), Weapons Procurement Bureau (*wuqi dinggou ju*), Ammunition Procurement Bureau (*danyao dinggou ju*), Radar Searchlight Management Bureau (*leida tanzhaodeng guanli ju*), Armament Scientific Research Bureau (*junxie kexue yanjiu ju*), Cadre Bureau (*ganbu ju*), and Finance Bureau (*caiwu ju*).

Between mid-1957 and late-1958, the Military Commission's eight general departments underwent a major reorganization, such that by the end of 1958 there were only three general departments – GSD, GPD, and GLD. The General Finance Department was subordinated to the GLD, the General Armament Department was placed under the GSD and then moved to the GLD in 1959; the General Cadre Department, Armed Forces Inspection Department, and Training Inspector General Department were abolished and their second-level elements were redistributed to the appropriate three remaining general departments.

Ministry of National Defense

There have been eight Defense Ministers since the 1954 Constitution established the MND.¹¹⁴ Peng Dehuai became the PRC's first Minister of National Defense in September 1954. Although the MND was modeled on the Soviet Defense Ministry model, it never had the same authority and the Party CMC has often by-passed it to directly control the general departments and service branches. Initially, the MND had some control over the military's scientific and technological establishment, military schools, and the recruiting-conscription system.

Marshal Lin Biao reorganized and strengthened the MND in late 1959, but still lost control to the CMC of research and development,¹¹⁵ schools, and the general

¹¹⁴ Dr. Harlan Jencks provided the information on the Ministry of National Defense. There have been eight Defense Ministers since the 1954 Constitution established the MND: Peng Dehuai (Sep 1954-Aug 1959), Lin Biao (Aug 1959-Sep 1971), position vacant (Sep 1971-Jan 1975), Ye Jianying (Jan 1975-Mar 1978), Xu Xiangqian (Mar 1978-Mar 1981), Geng Biao (Mar 1981-Nov 1982), Zhang Aiping (Nov 1982-Apr 1988), Qin Jiwei (Apr 1988-Mar 1993), Chi Haotian (Mar 1993-Present). The absence of a defense minister for over three years not only reflects the chaotic period of the Cultural Revolution, but also reveals that the position was not seen as central to the functioning of the PLA. Of note, in comparison to the lengthy entries on the CMC and general departments, the AMS encyclopedia has one short paragraph on defense ministries in general and merely lists the PLA's defense ministers.

¹¹⁵ Deng Liqun, Ma Hong, Wu Heng, eds., *China Today: Defence Science and Technology* (In English), Vol I & II, Beijing: National Defence Industry Press, 1993.

departments. After Lin's death in September 1971, the minister's position remained vacant until Marshal Ye Jianying was appointed in January 1975. Under Ye, the MND again reasserted control over schools and the military-industrial complex for a time. When Deng Xiaoping regained his authority in 1978, the ministry once again yielded most of its authority to the CMC. The center of gravity of military authority thus seems to have oscillated between the MND and the CMC from 1954 to 1978. In the mid-seventies, the MND still administered the recruiting-conscription system. The MND General Office (*bangongting*) drafted and published military regulations and manuals, and other MND organs had responsibilities relating to civil defense, the military budget, and possibly some supervision over military industry.

Since approximately 1980, the MND has been a shell organization, consisting of about fifty staff personnel. The MND as an institution, not to be confused with the power of the person who holds the position, exists solely for protocol purposes, so the PLA has an organization and minister equivalent to foreign defense establishments for high-level exchange purposes. The MND nominally controls PRC military attachés, the military mission to the United Nations, the Chinese delegation to the Korean Armistice Commission at Panmunjom, and the PLA's Foreign Affairs Office, but, in reality, the GSD's Second (Intelligence) Department controls them.

Until Mao's death in 1976, the defense minister was generally the most powerful individual in the PLA, not because of the post's inherent power, but because of his concurrent position as senior vice-chairman of the CMC. Moreover, an individual had to be well connected and widely accepted to be appointed to the post by the Politburo in the first place. All defense ministers to date have been Politburo members, an arrangement that is likely to continue. In recent years, however, the almost exclusively diplomatic role of the defense minister has been the apparent reason for the long tenure of Chi Haotian, a career political commissar. Zhang Wannian, a tough career field commander who succeeded Chi as chief of the general staff in 1992, has displaced Chi as senior soldier in the CMC. Although Zhang is now clearly senior to Chi, the latter remains defense minister owing to his experience in handling foreigners.

Current Administrative Structure

Today, the PLA's organizational structure for administration below the CMC is fairly consistent throughout the services from the highest level down to the lowest level. This structure consists of first (*yijibu*), second (*erjibu*), and in some cases third-level (*sanjibu*) elements. At the higher echelons, the first-level generally consists of

Between 1956-1958, the CMC established four research academies under MND, including the 5th (all missiles except air-to-air), 6th (aircraft and air-to-air missiles), 7th (ships), and 10th (electronics). In 1965, all four research academies were resubordinated from MND to their associated ministries of machine building (MMB or MMI): 3rd MMB (aviation) took over the 6th Research Academy; the 4th MMB (electronics) acquired the 10th Academy; the 6th MMB (shipbuilding) received the 7th Academy; and the 5th Research Academy was reorganized and became the 7th MMB (missiles). It is not clear if there was an 8th or 9th Research Academy under MND.

departments (*bu*), the second-level includes departments (*bu*), offices (*bangongshi*), and bureaus (*ju*),¹¹⁶ and the third-level consists of bureaus (*ju*), divisions (*chu*), or offices (*ke*).¹¹⁷ In the lower echelons, the first level consists of departments and divisions, while the second-level consists of divisions, offices (*ke*), and branches (*gu*). Table 1.11 provides an overview of how the structure looks from top to bottom. For example, the General Political Department (*zongzhengzhibu*) has a second-level Organization Department (*zuzhibu*), which has a subordinate Propaganda Bureau (*xuanchuanju*). This structure is the same for the services and the military region headquarters. At the army/corps level, there is a Political Department with a second level Organization Division (*zuzhichu*), with a subordinate Propaganda Office (*xuanchuanke*). At the regiment level, there is a Political Division (*zhengzhichu*) with a second level Organization Office (*zuzhike*) or Branch (*zhuzhigu*). Since the regiment administrative staff is so small there are no third level elements, so the officers in the second-level Organization Office/Branch are responsible for all the duties handled by their counterparts at higher headquarters.

Table 1.11 Administrative Level Comparison

Organization	First-Level	Second-Level	Third-Level
General Departments (<i>zongbu</i>)	4 Departments (<i>bu</i>)	Department (<i>bu</i>), office (<i>bangongting</i>), bureau (<i>ju</i>)	Bureau (<i>ju</i>)
Service HQ (<i>junzhong</i>)	4 Departments (<i>bu</i>)	Department (<i>bu</i>), office (<i>bangongshi</i>), bureau (<i>ju</i>)	Division (<i>chu</i>)
Military Region HQ (<i>junqu</i>)	4 Departments (<i>bu</i>)	Department (<i>bu</i>), office (<i>bangongshi</i>)	Division (<i>chu</i>)
MRAF/Fleet HQ (<i>junqu kongjun/jiandui</i>)	4 Departments (<i>bu</i>)	Office (<i>bangongshi</i>), Division (<i>chu</i>)	Office (<i>ke</i>)
Army/Corps (<i>jun</i>)	4 Departments (<i>bu</i>)	Division (<i>chu</i>)	Office (<i>ke</i>)
Air Command Post/base (<i>zhihuisuo/jidi</i>)	HQ department (<i>bu</i>)	Division (<i>chu</i>)	Office (<i>ke</i>)

¹¹⁶ First level department directors in the general departments, such as the GSD Operations Department, are major generals and have the grade of corps leader. First level bureau directors have the grade of division leader.

¹¹⁷ According to interviews with PLA officials, in the late 1990s, all of the third-level divisions (*chu*) subordinate to second-level departments in the four general departments were upgraded to bureaus (*ju*).

Division (<i>shi</i>)	HQ & political departments (<i>bu</i>); logistics & maintenance divisions (<i>chu</i>)	Office (<i>ke</i>)	
Brigade (<i>lü</i>)	4 Departments (<i>bu</i>)	Division (<i>chu</i>), Office (<i>ke</i>)	
Regiment (<i>tuán</i>)	Hq department (<i>bu</i>); political, logistics, & maintenance divisions (<i>chu</i>)	Office (<i>ke</i>), branch (<i>gu</i>)	
Battalion (<i>ying</i>)/Group (<i>dadui</i>)	N/A		
Company (<i>lian</i>)/Squadron (<i>zhongdui</i>)	N/A		

PROTOCOL ORDER IN THE PLA

The PLA is a very protocol oriented institution. When the PLA lists its military regions, services, service branches, administrative organizations, or its key personnel, the lists are almost always in protocol order, what the PLA calls organizational order (*zuzhi xulie*).¹¹⁸ The first criterion is generally the date a particular organization was established. For example, the order of the three services (*junzhong*) is always Army (August 1927), Navy (April 1949), and Air Force (November 1949). Since the Second Artillery Corps (July 1966) is technically a branch/service arm (*bingzhong*), and is usually not listed with the services.¹¹⁹ The criteria for listing personnel in protocol order is based on importance within the organization, and is not necessarily based on seniority in grade, rank, or position.¹²⁰

Military Regions

The seven military regions are generally listed in the following protocol order based upon the dates they were established (most prior to 1949) and where they fit in the

¹¹⁸ *Zhongguo junshi baike quanshu*, Volume 3, p. 856. The PLA lists the criteria as the organization's cover designator (*fanhao*), names of the leaders at each organizational level, origins (*shiji biancheng*), and relationship.

¹¹⁹ According to PLA officials, there has been a running internal debate for several years whether or not to upgrade the Second Artillery Corps to a service.

¹²⁰ For example, during the late 1980s, the PLAAF had four deputy commanders. Lieutenant General Yu Zhenwu was the youngest and was the last one promoted to this position, but he was listed first in protocol order.

level of importance at the time they were formed: Shenyang, Beijing, Lanzhou, Jinan, Nanjing, Guangzhou, and Chengdu.¹²¹ On the other hand, the PLA Air Force lists its seven military region air forces in a different order based on their priority and dates they were created:¹²² Shenyang (1955), Beijing (1955), Lanzhou (1955), Nanjing (1955), Guangzhou (1955), Jinan (1965), and Chengdu (1985). Whereas certain MRs were more prestigious in the past, this is no longer the case. Therefore, the protocol order is more of an administrative tool today rather than a reflection of priority within the hierarchy.¹²³

General Departments

Administratively, the PLA always lists the general departments in the following order: General Staff, Political, Logistics, and Equipment. This same order is reflected within the administrative structure of the military regions, services, and service arms down to the lowest level.

The subordinate departments, bureaus, and offices within each of the general departments are also listed in protocol order. The first criterion is when they were established, but some elements are placed higher in the order than older elements based upon their priority within the organization (the GSD's Army Aviation Bureau was not established until 1986, but was placed higher than other GSD bureaus that had been in existence since the 1950s). The second-level elements that are generally identified for the four general departments are as follows:¹²⁴

- **General Staff Department:** operations (*zuozhan*), intelligence (*qingbao*), signals (*tongxin*), training (*xunlian*), military affairs (*junwu*), mobilization (*dongyuan*), service arms (*bingzhong*), electronic countermeasures and information warfare (*dianzi duikang*), army aviation (*luhang*), and foreign affairs (*waishi*);
- **General Political Department:** organization (*zuzhi*), cadre/personnel (*ganbu*), propaganda (*xuanchuan*), security (*baowei*), discipline inspection (*jilu jiancha*), culture (*wenhua*), and liaison (*lianluo*);

¹²¹ See *Shijie junshi nianjian* [World Military Yearbook], 1987-1999; China's National Defense White Paper for 2000; and *Zhongguo renmin jiefangjun shi de 70 nian* [70 Years of the PLA], Beijing: Junshi Kexue [Military Science] Publishers, July 1997, p. 623.

¹²² This is based on analysis of information obtained on the PLAAF over a fifteen year period. This is also the order shown in Wang Hai, *Wang Hai Shangjiang: wode zhandou shengya* [General Wang Hai: My Combat Career], Beijing, Zhongyang Wenxian Chubanshe [Central Literature Publishers], February 2000, p. 300

¹²³ Correspondence with Professors John Lewis and Xue Litai at Stanford University.

¹²⁴ See *Shijie junshi nianjian* [World Military Yearbook], 1987-1999.

- **General Logistics Department:** finance (*caiwu*), quartermaster (*junxu*), health (*weisheng*), transportation (*junshi jiaotong*), fuels and materials (*youliao wuzi*), capital construction (*jijian yingfang*), and audit (*shenji*); and
- **General Equipment Department:** plans (*jihua*), service arms (*junbingzhong*), army equipment research and procurement (*lujun zhuangbei keyan dinghuo*), general purpose equipment support (*tongyong zhuangbei baozhang*), electronics and information (*dianzi xinxi*), and joint equipment maintenance (*zhuangbei jishu hezuo*).

Service Arms

Each of the services also lists its specialized service arms (*zhuan ye bingzhong*) and troops (*budui*) in protocol order as follows:¹²⁵

- **Army:** the specialized service arms include infantry (*bubing*), artillery (*paobing*), armor (*zhuangjiabing*), engineering (*gongchengbing*), signals (*tongxinbing*), chemical defense (*fanghuabing*); and the troops include electronic countermeasure/ information warfare (*dianzi duikang*), cartography (*cehui*), and aviation (*hangkongbing*);
- **Navy:** the specialized service arms include surface vessel units (*shuimian jianting budui*), submarine units (*qianting budui*), naval aviation (*hangkongbing*), coastal defense (*anfangbing*), and marine corps (*luzhandui*);
- **Air Force:** the specialized service arms include aviation (*hangkongbing*), anti-aircraft artillery (*gaoshepaobing*), surface-to-air missile (*dikong daodanbing*), radar (*leida*), and airborne (*kongjiangbing*). Prior to 1991, the air force also listed signals (*tongxinbing*) as a specialized service arm; and
- **Second Artillery Corps:** Second artillery does not have any specialized service arms, but does consist of short-range (*jincheng*), medium-range (*zhongcheng*), long-range (*yuancheng*), and intercontinental (*zhouji*) ballistic missile troops, engineering troops, and operations, equipment, and logistics support troops.

PLA Personnel

The PLA generally lists its personnel in official announcements according to the following standard order of positions: commander, political commissar, deputy commander(s), deputy political commissar(s), chief of staff (who is also the director of the headquarters department), director of the political department, director of the joint logistics department, and director of the equipment department.¹²⁶ Within these lists, the deputy commanders and deputy political commissars are usually ranked in protocol

¹²⁵ Analysis of multiple PLA articles over several years.

¹²⁶ For example, the 1 August 2000 issue of the *Sichuan ribao* listed the names of the Chengdu Military Region Party Committee Standing Committee (*dangwei changwei*).

order, which is not necessarily according to the dates they assumed the position. As with any aspect of the PLA, there are always exceptions to the rule. However, combining these types of lists with information from other sources helps provide a better picture of command organizations.

2. THE CENTRAL MILITARY COMMISSION AND MILITARY POLICY IN CHINA

By Nan Li¹²⁷

As China's People's Liberation Army (PLA) withdrew from the societal politics of the Cultural Revolution, and more recently from its extensive business activities, its leadership should become more capable of concentrating its attention and energy on major issues associated with PLA force modernization. Similarly, no longer as distracted by major domestic, social, political and commercial concerns, this leadership may also become more inclined to involve itself in formulating China's national security policy. Both developments can have significant implications for future Chinese security policy and Asian security. However, the central institution that constitutes the core of this leadership, the Central Military Commission (CMC), has not been well understood due to a lack of serious analysis.¹²⁸ This study intends to fill this knowledge gap through an in-depth examination of the CMC. Specifically, it addresses the following research questions. What are the central roles and missions of the CMC? What are the origins of the CMC and how has it evolved since its founding? How is the CMC structured, and what are the major institutional norms and mechanisms for its functioning? What is the nature and structure of the CMC's relationship with major civilian institutions, and with lower level operational departments and units? What are the strengths and weaknesses of the CMC in fulfilling its central roles?

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¹²⁸ An exception is Michael Swaine's work. But since Swaine's brief analysis of the CMC is a part of a larger study of China's national security policy, a separate and in-depth examination of the CMC is justified. See Michael Swaine, "The PLA and Chinese National Security Policy: Leaderships, Structures, and Processes," in David Shambaugh and Richard Yang, eds., *China's Military in Transition*, Oxford: Clarendon Press, 1997.

This study intends to make a contribution to the basic knowledge and understanding of the CMC through a narrative account by illustrating what the CMC is rather than develop a theoretical argument or test a theoretical proposition. Consequently, the bulk of this study will concentrate on a description of the CMC's roles and missions, origins and evolution, structure, norms and mechanisms, and relationships. On the other hand, since the CMC is located at the key institutional junctures of both the PLA bureaucratic hierarchy and China's civil-military relations, this study touches on issues regarding the organizational theory and civil-military relations. As a result, the concluding section will address the bureaucratic and civil-military structures and dynamics regarding CMC effectiveness in fulfilling its roles.

The study is divided into four major sections. The first section examines the central roles and evolving missions of the CMC. The second looks into the origins and the historical evolution of the CMC. The third section addresses the CMC structure, norms and mechanisms, and relationships. The concluding section critically evaluates the CMC-based bureaucratic and civil-military structures and dynamics that affect CMC effectiveness.

ROLES AND EVOLVING MISSIONS

Roles

In a modern democracy, the military is nonpartisan and pledges its allegiance to the Constitution. It is also mitigated by a civilianized defense bureaucracy that answers to the popularly elected executive and legislature based on the requisites of the Constitution. China, however, is not a democracy, but rather an authoritarian Leninist regime where the Chinese Communist Party (CCP) has a monopoly on political power. As a result, the PLA, headed by the CMC, pledges its allegiance to the CCP rather than to popularly elected civilian authorities. The CMC functions as the military work department (*junshi gongzuo bumen*) of the CCP, and answers to the CCP Central Committee and the Politburo. The CMC chair, who is the commander-in-chief of the PLA, also "comes from among the principal leaders of the Party Central (*dang zhongyang*).” The central roles of the CMC include military policy-making, and coordination in both policy implementation and in managing the PLA, i.e., “as the highest military policy-making institution (*zuigao junshi juece jiguan*), the CMC conducts uniform command (*tongyi zhihui*) of the country's armed forces ... according to the line (*luxian*), guiding principles (*fangzhen*), and policy (*zhengce*) of the CCP Central.”¹²⁹

Evolving Missions

While the CMC has been managing military affairs on behalf of the CCP, the specific missions of the CMC have changed over time. This change happened largely

¹²⁹ Yan Shikun, *Dangdui jundui juegui lingdao lilun yu shijian* [The Theory and Practice of the Party's Absolute Leadership over the Army], Beijing: Military Science Press, 1993, pp. 11, 174-175 (hereafter *Theory and Practice*).

because the CCP line and policy have changed over time. After its founding in the 1920s, for instance, the CCP adopted a line of a united front with the Kuomintang (KMT or Nationalist Party), where the CCP assisted the KMT and its army in their attempt to reunify China through expeditionary campaigns against the provincial warlords. Without an army of its own to command, the CMC, in accordance with the CCP policy of the united front, had a minor role to play. Its primary mission was to "direct CCP organizational and liaison work within the KMT Army." It also coordinated the organization of the workers' and peasants' arms to assist the KMT Army's expeditionary campaigns against the warlords.¹³⁰

With the breakup of the CCP-KMT united front in the late 1920s, the CCP line changed. Rather than a moderate policy that placed emphasis on cooperation with the KMT to promote national reunification, the CCP now adopted a radical line. Such a line stressed class struggle-based land reform and an armed struggle against KMT rule. In the meantime, after several failed urban uprisings against KMT forces, several KMT Army units, influenced by the CCP, retreated to the remote mountains of southern Jiangxi Province. Together with local peasant forces in several southern provinces, these units were reorganized into the Chinese Workers and Peasants Red Army, which pledged its allegiance to the CCP. Now that the CCP had its own army and the emphasis of the Party line had shifted to armed struggle against the KMT, the CMC began to embark on more substantial missions. From the late 1920s to the middle 1930s, such missions included coordinating the expansion of the Red Army, directing the development of the Soviet bases, and formulating military strategy to resist the KMT Army's annihilation campaigns. To the extent expanding the Red Army and developing Soviet bases relied on the success of land reform, the CMC and the Red Army were also heavily involved in radical land reforms. In doing so, the CMC was not only concerned with the military missions but also heavily involved in social and political functions.¹³¹

The setback of a decisive military campaign against the KMT forces in Jiangxi led to the Long March that brought the CCP Central and the Red Army to the barren loess plateau of northern Shaanxi province. This setback coincided with the beginning of Japan's invasion of China's heartland. The CCP's successful mediation of an incident in the city of Xi'an, where KMT leader Chiang Kai-shek was kidnapped by one of his generals for fighting the CCP rather than the Japanese, led to a second CCP-KMT united front: to fight against the Japanese invasion. The CCP line changed again: this time away from the radical land policy of Jiangxi. Rather than confiscating land from the landlords, the alleged social basis of the KMT, the rural policy emphasis had shifted to reducing land rent and interests of loans to avoid social polarization and division in the countryside. Rather than treating the KMT Army as the primary adversary, the new enemy became the Japanese invaders. Consequently, the missions of the CMC also

¹³⁰ *Zhongguo renmin jiefangjun* [China's People's Liberation Army] Beijing: Contemporary China Press, 1994, p. 340 (hereafter *China's People's Liberation Army*).

¹³¹ Yan, *Theory and Practice*, pp. 92-94, 204-206; and *China's People's Liberation Army*, p. 341.

shifted. It was now responsible for reorganizing and integrating the Red Army into the KMT National Army, while maintaining its political independence from the KMT and allegiance to the CCP. The CMC was also bestowed the responsibility for designing and implementing a guerrilla warfare strategy based on protraction, dispersion, and combining warfare with social and political tasks, such as developing anti-Japanese bases behind the enemy lines through mobilizing the masses.¹³²

The end of the Anti-Japanese War led to the termination of the second CCP-KMT united front, and the resumption of the civil war. The CCP line shifted again, this time toward defeating the KMT forces and establishing a "new democracy" regime where the CCP would dominate, but other social groups would be represented. As a result, the CMC was assigned new missions. These involved formulating and executing an active defense strategy, which stressed annihilating the KMT forces by piecemeal through stratagems and mobility, thus enabling the CCP forces to shift gradually from the defensive to the offensive. The CMC also directly conducted several decisive campaigns, which fatally crippled the KMT forces and contributed to the collapse of the regime.¹³³

The founding of the People's Republic of China (PRC) in late 1949 was soon followed by the crisis on the Korean Peninsula. To "prevent the failure of the Korean revolution which would jeopardize the accomplishments of the Chinese revolution," the CCP Politburo decided to send PLA forces to Korea to "fight the counterrevolutionary alliance of the US, South Korea, Taiwan, and Japan."¹³⁴ The CMC was instrumental this time in organizing and deploying the People's Volunteers to Korea, formulating strategies, coordinating operations, and directing major campaigns. The end of the Korean War was followed by a new CCP "general line," which aimed to achieve "the socialist transformation of means of production in agriculture, handicraft, industry and commerce (referring to nationalization of productive means)," and "industrialization" of the country. For the PLA, rather than directly participating in "socialist transformation" and "industrialization," its new function was to secure these programs through national defense. As a result, the CMC was bestowed with new missions. These missions involved formulating and coordinating policy programs concerning downsizing the PLA, the PLA work in education and training, arms and equipment development, scientific research, logistics and separating the PLA from civilian functions.¹³⁵

The focus of the CMC on national defense-related military missions, however, proved to be short-lived. The anti-Rightist campaign of 1957 and the criticism of the

¹³² Yan, *Theory and Practice*, pp. 94-96, 206-209; and *China's People's Liberation Army*, p. 341.

¹³³ Yan, *Theory and Practice*, pp. 96-97, 209-212.

¹³⁴ Ibid, pp. 213-214; Academy of Military Science Military History Research Department, *Zhongguo renmin jiefangjun qishi nian: 1927-1997* [Seventy Years of China's People's Liberation Army: 1927-1997], Beijing: Military Science Press, 1997, pp. 405-410 (hereafter *Seventy Years*).

¹³⁵ AMS Military History Research Department, *Seventy Years*, pp. 446-467.

CCP's Great Leap Forward and People's Commune policy in 1959 by Peng Dehuai (the defense minister and the CMC member responsible for daily affairs) convinced Mao Zedong (the CCP chair) that the bourgeois ideology continued to exercise influence even after the means of production had been socialized, and that bourgeois representatives did exist in the CCP, the government, the PLA, and throughout Chinese society. Therefore, the emphasis of the CCP line should shift from economic construction and industrialization to class and "lines" struggle, which aimed to expose and weed out those in responsible positions who "take the capitalist road." With the gradual radicalization of the CCP line, the missions of the CMC also began to change. After Lin Biao succeeded Peng in 1960 as the new defense minister and the CMC vice chair responsible for daily affairs, he proposed that the guiding principle of the PLA work was for "politics to take command." As a result, the attention and energy of the CMC began to shift gradually toward formulating and coordinating politics-related programs, which aimed to promote Mao's revolutionary ideals and advise vigilance about the "bourgeois representatives" hidden in the PLA.¹³⁶

The ultimate expression of the new CCP line to "remove those who take the capitalist road" was the outbreak of the Cultural Revolution in 1966, which caused the paralysis of the civilian Party-state apparatus. As a result, the PLA was called upon to undertake new missions to support the program of "Three Supports" and "Two Militaries" ("*sanzhi*" "*liangjun*," or "supporting the leftists, workers, and peasants," and "military control and training") to fulfill the civilian functions previously done by the Party-state bureaucracy. These missions involved formulating, coordinating and supervising policy programs associated with the "Three Supports" and "Two Militaries." They ranged from propagating Maoist revolutionary ideology and promoting "continuous revolution" and class struggle throughout Chinese society, to managing daily affairs in central, provincial and local governments, and in factories, communes, schools, and other civilian working units.¹³⁷

With the radical CCP domestic line in the late 1950s came an equally radical foreign policy characterized as changing from attempting to improve relations with foreign governments, to supporting the Maoist radical movements and regimes and promoting "world class struggle and revolution" through armed struggles. These struggles aimed to overthrow the established world order allegedly dominated by traditional US-led Western "capitalism and imperialism" and the new Soviet "bureaucratic capitalism" and "social imperialism." The shift in foreign policy also had an impact on the missions of the CMC, as it was involved in designing and coordinating programs in providing military assistance and training to the radical Maoist or national liberation movements in various continents of the world.¹³⁸

With the death of Mao and the removal of the Maoist radicals (known as the Gang of Four) in 1976 and the ascendance of Deng Xiaoping to power in the late 1970s and

¹³⁶ Ibid., pp. 496-503.

¹³⁷ Ibid., pp. 553-564.

¹³⁸ Ibid., pp. 585-594.

early 1980s, the CCP line changed again. Eschewing the Maoist emphasis on class and "lines" struggle and "continuous revolution in the realm of ideology," the new emphasis was placed on "developing productive forces." As a result, a nation-building program, couched in the notion of "Four Modernizations (modernizing industry, agriculture, science and technology, and national defense)," was officially endorsed. For the PLA, rather than actively participating in the intense domestic "class" and "lines" struggle and supporting "world revolution" abroad, it was now required to withdraw from the societal politics of the Cultural Revolution and concentrate on peacetime army building and national defense.

Accordingly, two distinctive changes took place regarding the CMC and its parent institution and the missions it is to fulfill. While the CMC continues to answer to the CCP Central, it is also required by the 1982 Constitution to answer to the National People's Congress (NPC), China's legislature. In terms of major missions, the CMC is now supposed to fulfill the following:

- 1) to conduct uniform command of the nation's armed forces;
- 2) to decide (*jueding*) the military strategy and the operational principles of the armed forces;
- 3) to lead and manage PLA building, which involves formulating programs (*guihua*), planning (*jihua*), and organizing implementation;
- 4) to propose and forward motions (*yi'an*) to the NPC and its standing committee;
- 5) to make military laws and regulations according to the Constitution and the laws, and to issue military decisions and orders;
- 6) to determine the PLA system of organization (*tizhi*) and organizational scale (*bianzhi*), and to define the missions and responsibilities of the PLA general departments, the services, and the MR (military region) level organizations;
- 7) to appoint and release (*renmian*), cultivate and train (*peixun*), examine and check (*kaohe*), and reward and penalize (*jiangchen*) the members of the armed forces;
- 8) to approve the systems of arms and equipment of the armed forces, and the programs and plans for arms and equipment development; and in coordination with the State Council, to lead and manage the national defense scientific research and production;
- 9) together with the State Council, to manage the national defense expenditure and assets;
- 10) to fulfill other responsibilities according to law.¹³⁹

¹³⁹Zhang Wannian, *et al*, eds., *Dangdai shijie junshi yu zhongguo guofang* [Contemporary World Military Affairs and China's National Defense] Beijing: Military Science Press, 1999, p. 218 (hereafter *Contemporary World Military Affairs*).

ORIGINS AND EVOLUTION

Origins

The conceptual origin of a communist party which possesses its own military department and forces, such as the CCP, can be traced to Lenin's theory of revolution. The classical Marxist theory of a socialist revolution is based on the premise that industrial capitalism would create conditions for its own demise: the socialization of workers in organized production in modern factories, which would provide organization and discipline; and the alienation of the working class from the capital and the machines for lack of their participation in the ownership and production decision making, which would generate the necessary revolutionary consciousness. Lenin, however, believed that both organization and revolutionary consciousness would not develop spontaneously as a historical inevitability, particularly in places like Russia where industrial capitalism had not been fully developed. They would rather be cultivated and developed through the workings of a highly centralized, disciplined, politically aware, and cadre-based vanguard party. Also, the bourgeoisie controls state power, including its military force, and would defend itself through armed resistance or suppression against a proletarian revolution. As a result, this vanguard party should also acquire its own military force, for the purpose of armed uprisings against the capitalist class-dominated state power, particularly in the urban areas where the bourgeoisie resides and whose influence dominates.¹⁴⁰

To the extent the CCP is a brainchild of the Moscow-based Communist International (Comintern), the Leninist theory of organization and revolution left its unmistakable mark on the organization of the CCP, with its strong emphasis on organization and propaganda. Organization serves the purpose of generating unity, discipline and strength for the revolution, while propaganda serves to awaken and develop the class-based consciousness and identity for the revolution. Finally, it is no coincidence that the idea of a military department such as the CMC to be established within the CCP Central for coordinating military affairs was first proposed by Wang Yifei, the head of the Chinese military class who returned to Shanghai in 1925, after completing his studies in the Soviet Red Army academies.¹⁴¹

Even though the birth of the CCP is related to the theory and practice of the Russian revolution, Moscow was not interested in a working class-based socialist revolution in China where the CCP would play the leading role, largely due to the perceived underdevelopment of Chinese industrial capitalism. Instead, the attention of the Comintern was devoted to the KMT, particularly in reorganizing it into a Leninist style

¹⁴⁰ Lenin, "What Is to Be Done? Burning Questions of Our Movement," and "The State and Revolution: The Marxist Theory of the State and the Tasks of the Proletariat in the Revolution," both in Robert C. Tucker, ed., *The Lenin Anthology*, New York: Norton & Company, 1975, pp. 12-114, 311-406.

¹⁴¹ Zhao Gongde, et al., *Zhongguo renmin jiefangjun lishi shang de qishi ge jun* [The Seventy Corps in the History of China's People's Liberation Army], (Tianjin: Tianjin People's Press, 1993), p. 37. Also see Table 1.

party, and in assisting the establishment of the Huangpu Military Academy. The doctrinal excuse of the Comintern for the neglect of the CCP, which the CCP leaders accepted as an article of faith, was the "theory of two revolutions" ("*liangci geminglun*"). Such a theory assumes that the CCP-led working class should assist the bourgeoisie-based KMT to carry out a national democratic revolution first. Such revolution would lay the foundation for national unification and industrialization. In the process, the CCP and the working class would also gain economic benefits and political rights for the lawful struggles. As capitalism developed more fully and lawful struggles lead to the winning over of a substantial number of the masses and the soldiers, the CCP would organize and launch urban armed uprisings "at an appropriate time." Such uprisings would overthrow the bourgeois rule "at one stroke," making it possible for the CCP to seize state power and realize a socialist revolution.¹⁴²

The implications of such a theory for CCP development are that it hampered the independence and autonomy of the CCP, which was required to operate as a "block within" the KMT, and denied the CCP the rationale for developing its own army, particularly in the early phase of a "national democratic revolution". The neglect of military affairs in the early years of the CCP was reflected in several aspects concerning the CMC. First, there was no central military department until after the regional party organizations established their own military departments.¹⁴³ Also, the early CCP military departments had only the limited power to suggest and discuss (*jianyi taolun quan*), but not to make decisions and to command forces.¹⁴⁴ Finally, even after the CMC was established, it was not headed by the CCP general secretary, who seemed to be genuinely disinterested in military affairs (See Table 2.1). It was not until after the breakup of the CCP-KMT united front in 1927, where the CCP was successfully suppressed by the KMT Army, that the CCP leadership realized the importance of an army that was loyal to the Party and began to pay attention to military affairs.

¹⁴² AMS Military History Research Department, *Seventy Years*, p. 15.

¹⁴³ The CCP Regional Committee in Guangdong, for instance, established its military department as early as in the winter of 1924. See Xu Yan, *et al.*, *Mao Zedong junshi sixiang fazhan shi* [History of the Development of Mao Zedong's Military Thought], Beijing: Liberation Army Press, 1991, p. 8.

¹⁴⁴ Zhao, *The Seventy Corps*, p. 38.

Table 2.1 Central Military Commission, 1925-1928

Critical Years	Name Changes	Members
February, 1926	Central Military Department (CMD) Established at the Politburo special meeting in Beijing**	Director: Zhang Guotao. Members: director, Wang Yifei, Ren Bishi.
November 1926	CMD renamed Central Military Commission(CMC)	Director: Zhou Enlai. Secretary: Wang Yifei.
August 1927 - 1928	CMC downsized to Central Military Section (<i>ke</i>) under CCP Organization Bureau	Zhou Enlai

* Adapted from Jiang Siyi, *et al*, eds., *Zhongguo renmin jiefangjun dashi dian* [A Dictionary of the Major Events of China's People's Liberation Army] Tianjin: Tianjin People's Press, 1992, p. 2124 (hereafter *Dictionary*).

**Some Chinese military historians, however, suggest that the CMC was established in October 1925 at an enlarged conference of the CCP Central of the 4th CCP Congress. See Academy of Military Science Military History Research Department, *Zhongguo renmin jiefangjun qishi nian: 1927-1997*, Beijing: Military Science Press, 1997, p. 15.

Red Army Period (1928-1936)

This period witnessed the growing importance of the CMC. This was reflected in several policy changes. First, as specified by the *Military Work Outline (junshi gongzuo dagang)* issued by the CCP Central in April 1928, "the CMC not only has the power to suggest and to discuss, but should also have the responsibility to command the military forces and to manage military affairs under the military movement policy of the Party..." The CCP Central should also establish CMC branches (*fenhui*) in provinces "where substantial military movements, and significant Workers and Peasants Revolutionary Army units exist."¹⁴⁵ But more importantly, the post-1927 shift of the CCP policy to the radical "land revolution and armed struggle against the KMT regime" meant that a new dimension was added to the traditional mobilization of the workers and peasants through propaganda and organization: the "militarization of the workers and peasants" (*gongnong junshi hua*) also meant the "workerization and peasantization of the military" (*jundui gongnong hua*). By the same token, such a policy shift also drove the CCP leaders who traditionally specialized in propaganda and organization to military work. Similarly, the new tasks of radical land redistribution to mobilize peasant youth to join the Red Army, and developing and expanding the Soviet bases meant that the top Red Army officers were also to be well versed in propaganda, mass mobilization, and local administration, hence, the "militarization of the Party cadres" and the "politicization of the military

¹⁴⁵ Cited in *Ibid.*, pp. 38-39.

cadres." This is reflected in the membership of the CMC by men such as Zhu De, Peng Dehuai, and Lin Biao, in addition to several top Red Army officers who received formal military education from Huangpu or from the earlier provincial "military lecture halls" (*jiangwu tang*) and served as officers in the pre-1927 KMT Army. There were also many who were actually Party cadres who received little military training (see Table 2.2). All these developments laid the basis for the political-military fusion of the Chinese communist leadership, which has been extensively discussed in Western scholarly work on communist civil-military relations.¹⁴⁶

This political-military symbiosis, or the blurring of the civilian-military boundary, does not mean that such leadership is highly unified. On the contrary, this leadership was highly fragmented during this period. But such fragmentation is not based on a civil-military divide, but rather on cleavages that cut across the civil-military boundary. One major cleavage, for instance, is the divide between the political-military leadership of the local Soviet bases on the one hand, and the Shanghai-based (until 1933) Politburo-CMC leadership on the other. The guiding principle for the armed struggles during this period was to establish the so-called "separate armed regimes of the workers and peasants" (*gongnong wuzhuang geju*). This principle means that the central task of the Red Army was to develop Soviet bases in remote, isolated, and economically backward inter-provincial border areas neglected by provincial warlords and where the KMT control was also the weakest. Two major characteristics resulted from the development of these bases. First, "the principal Party leaders of each Soviet base were also the leaders of the Red Army units in that area." Second, "while accepting the strategic guidance of the CCP Central and the CMC, local leaders made decisions about campaigns and battles, and strategic development largely based on the local conditions. The Red Army units in each Soviet base generally fought their battles in their own ways (*gezi weizhan*)."¹⁴⁷

Table 2.2 Central Military Commission, 1928-1936

Critical Years	Name Changes	Members
June-July, 1928	CCP Central Military Department restored at CCP 6th Congress held in Moscow	Director: Yang Yin. Zhou Enlai replaced Yang in August 1929 after Yang was arrested by KMT.
February, 1930	CCP CMC (Shanghai)	Secretary: Guan Xiangying Standing Committee: Zhou Enlai, Guan Xiangying, and Zheng Zhongsheng . Zhou Enlai replaced

¹⁴⁶ See particularly Amos Perlmutter, *et al*, "The Party in Uniform: Toward a Theory of Civil-Military Relations in Communist Political Systems," *American Political Science Review*, Vol. 76, No. 4, December 1982, pp. 778-789.

¹⁴⁷ AMS Military History Research Department, *Seventy Years*, p. 76.

		Guan as secretary in August.
January, 1931	Central Revolutionary Military Commission(CRMC) of the CCP Central Bureau in Central Soviet Area (Jiangxi) established	Chair: Xiang Ying Vice chairs: Zhu De, Mao Zedong.
November, 1931	CRMC of the Central Soviet Republic Provisional Central Government (Jiangxi) established	Chair: Zhu De. Vice chairs: Wang Jiaxiang, Peng Dehuai. Members: chair and vice chairs, Lin Biao, Tan Zhenlin, Ye Jianying, Kong Hechong, Zhou Enlai, Zhang Guotao, Shao Shiping, He Long, Mao Zedong, Xu Xiangqian, Guan Xiangying, Wang Shengrong.
January, 1933	CCP CMC merged with CRMC in Jiangxi as CCP Central moved from Shanghai to Jiangxi	Bo Gu (Qin Bangxian) and Guan Xiangying were added as members of CRMC. Guan became acting commanding frontline Red Army chair in May.
February, 1934	New CRMC elected by the Second Central Soviet National Congress	Chair : Zhu De. Vice chairs: Zhou Enlai, Wang Jiaxiang. Real power was allegedly controlled by Bo Gu and Comintern China representative Li De.
1935 (Long March)		Zunyi Conference in January designated Zhou Enlai and Wang Jiaxiang responsible for military work. A three-person military leadership group was established in March, including Zhou Enlai, Wang Jiaxiang, and Mao Zedong. Zhang Guotao was added in June. A five-person group (<i>wu ren tuan</i>), including Mao, Zhou, Wang, Peng Dehuai, Lin Biao, was established in September.
November (end of Long March) 1935	Northwestern Revolutionary Commission of the Chinese Soviet Military established in Northern Shaanxi	Chair: Mao Zedong Vice chairs: Zhou Enlai, Peng Dehuai. Members: Chair and vice chairs, Wang Jiaxiang, Nie Hongjun, Lin Biao, Xu Haidong, Cheng Zhihua, Guo Hongtao. Ye Jianying, Nie Rongzhen, and Liu Zhidan were added as members in April 1936.

October-December, 1936	CRMC of the Chinese Soviet restored as three Front Red Armies converged	<p>Chair: Mao.</p> <p>Vice chairs: Zhou Enlai, Zhang Guotao.</p> <p>Presidium: chair and vice chairs, Zhu De, Peng Dehuai, Ren Bishi, He Long.</p> <p>Members: chair, vice chairs and presidium members, Xiangying, Lin Biao, Wang Jiaxiang, Xu Xiangqian, Chen Changhao, Liu Bochong, Guan Xiangying, Ye Jianying, Chen Yi, Xiao Ke, Dong Zhentang, Xu Haidong, Nie Rongzhen, Guo Hongtao, Zhang Yunyi, Wang Weizhou.</p>
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*Adapted from Jiang, *A Dictionary*, pp. 2124-2128; Liao Gailong, *et al*, eds., *Dangdai zhongguo zhengzhi dashi dian* [A Dictionary of the Major Political Events in Contemporary China], Changchun: Jilin Literature and History Press, 1991, pp. 321-322; *Zhongguo renmin jiefangjun, shangche* [China's People's Liberation Army, Book One], Beijing: Contemporary China Press, 1994, pp. 340-341; and AMS Military History Research Department, *Junqi piaopiao: xin Zhongguo wushi nian junshi dashi shushi* [Colors Are Fluttering: Recounting the Major Military Events in the 50 Years of New China], Beijing: Liberation Army Press, 1999, pp. 70-71(hereafter *Colors are Fluttering*).

As these local leaders became members of the CMC,¹⁴⁸ clashes over policy and strategies became inevitable with the dominant members of the CMC who were trained in Soviet revolutionary and military strategies and tactics and retained regular and close contact with the Comintern. In 1930, for instance, CCP leader Li Lisan advocated a strategy of "unified organization and command of the Red Army" to "attack the enemy's vital communication lines (*jiaotong yaodao*), main forces (*zhuli*), and central cities (*zhongxin chengshi*)" so that "a national general uprising" would be ignited. Beginning in early 1931, Wang Ming, the new CCP leader, stressed a strategy of 'continuous offensive to take central cities' to ensure "the success of the revolution in one or several provinces." After the CCP Central and the CMC moved from Shanghai to Jiangxi in early 1933, and while KMT annihilation campaigns intensified, Wang allegedly adopted a rigid

¹⁴⁸ In the CMC during this period, Zhu De (commander), Mao Zedong (commissar), Peng Dehuai and Lin Biao represented the Red Army forces of the *gan'nan* (southern Jiangxi) *minxi* (western Fujian) Soviet area, which is also known as the central Soviet area, or *zhongyang suqu*. He Long represented the Red Army of the *xiang* (Hunan) *erxi* (western Hubei) Soviet area. Zhang Guotao, Chen Changhao, and Xu Xiangqian, on the other hand, represented the Red Army of the *er* (Hubei) *yu* (Henan) *wan* (Anhui) Soviet area. The *Gan'nan minxi* Red Army was reorganized as the First Front Red Army, the *xiang erxi* Red Army the Second Front Red Army, and the *er yu wan* Red Army the Fourth Front Red Army in the early 1930s and during the Long March.

“pure defense” (*danchun fangyu*) stance, which emphasized “warding off the enemy outside the gate of the state” (*yudi yu guomen zhiwai*) and “fighting the tough with toughness” (“*yingda yingpin*”).¹⁴⁹

These strategies, however, ran counter to the view held by most of the leaders at the local Soviet bases. This view stressed the need to develop rural bases and build up the Red Army and not attempt to trigger urban uprisings by attacking and capturing big cities. It also stressed dealing with the KMT annihilation campaigns by using a more flexible strategy of “luring the enemy in deep” and constituting local superiority through mobility to strike the weakest link of the enemy offensive, but not “fending off the enemy outside the gate” and “matching strong force with strong force.” Such differences led to severe friction between the CCP-CMC Central and the leadership in local bases. For instance, to “impose their political line and military strategy, the CCP leaders dispatched central delegations or delegates to the Soviet bases, or established CCP central bureaus, bureau branches, and provincial committees in base areas, displacing local leaders or denying their speaking and voting rights in discussing and deciding strategic questions, and even their commanding power over campaigns and battles. All these local commanders could do was to avoid errors in campaigns and battles in their limited scope of responsibilities.”¹⁵⁰ The most noted example was the removal of Mao from his commissar position of the First Front Red Army in October of 1932 for his insistence on dispersing his troops to mobilize the masses and in order to prepare for another KMT annihilation campaign, rather than follow the order of the CCP Central to attack westward to capture Ji'an or northward to capture Wuzhou, in order to threaten Nanchang, the capital of Jiangxi.¹⁵¹

Besides the central-local tension, another major cleavage that cut across the civil-military boundary was the tension among political-military leaders of different Soviet bases. When Red Army units in each Soviet base operated on their own in highly isolated border areas and had little communication or coordination with one another, such cleavages didn't exist. But when these separate units converged, such as during the Long March, inter-front army tension arose due to disparity in objectives and strength. For instance, when the First Front Red Army (also known as the Central Red Army, headed by Mao, Zhu, and Zhou), and the Fourth Front Red Army (led by Zhang Guotao and Chen Changhao) met in June 1935 in northwestern Sichuan, severe disagreement occurred between the leaderships of the two armies about the objective of the Long March. While the First Front Army leaders proposed to march northward to establish the Soviet base in the interprovincial border region of Shaanxi, Gansu and Sichuan, the Fourth Front Red Army leaders argued for movement either westward to Qinghai and Xinjiang, or

¹⁴⁹ See AMS Military History Research Department, *Seventy Years*, pp. 62, 105-117.

¹⁵⁰ *Ibid.*, p.78.

¹⁵¹ *Ibid.*, pp. 109-110. Mao's position was taken over by Zhou Enlai. For this, Zhou had to make self-criticism for following the “wrong line” in Jiangxi in almost every CCP rectification campaign thereafter.

southward to the Chuan (Sichuan) - Kang (Xikang, currently eastern Tibet) border region. The disagreement escalated to the point that Zhang Guotao allegedly refused to march northward, mobilized his subordinates to demand that he become the CMC chair (since the Fourth Front Red Army was the largest among the three), and even attempted to establish a separate CCP Central after marching some of the newly integrated Red Army units southward.¹⁵²

Reflected in the composition of the CMC of the two major cleavages (central-local and inter-front army) is the frequent reshuffling of the CMC membership (see Table 2.2), which also suggests the highly unstable and volatile nature of the CCP-CMC leadership. These cleavages were apparently exacerbated by the failed military policy, strategies and campaigns, and the ensuing factional scapegoating and bickering among this leadership.

1937-1949 Period

The CMC membership during this period remained relatively unchanged, which reflected a higher level of leadership unity when compared to the Red Army period (see Table 2.3). Several major factors may have contributed to this leadership stability. The failed "urban strategy" and "fortress defense" in Jiangxi and the fate of the West Route Army in late 1936, discredited the "Moscow returnees" and Zhang's elements among the top leadership.¹⁵³ This failure also validated Mao's rural strategy and "luring enemy in deep" approach in Jiangxi, and the northern strategy for the Long March. Both apparently contributed to the elevation and consolidation of the power of Mao and his followers. The uprooting of the Red Army units from their southern bases and the tremendous casualties suffered during the Long March, and their convergence in the unfamiliar territory of northern Shaanxi, may have generated a strong sense of vulnerability and thus a heightened desire for a stronger central leadership. The relationships among the 20,000 survivors, hardened by the difficult experience in Jiangxi and during the Long March, enhanced group solidarity and helped Mao and his followers to consolidate power. The newly formed united front with the KMT against the Japanese invaders reduced KMT military pressure on the CCP forces. Similarly, the KMT forces fought the Japanese forces on major fronts, while the CCP forces engaged mainly in guerrilla warfare behind

¹⁵² Ibid., pp. 126-130.

¹⁵³ The West Route Army, constituted mainly of the Fourth Front Red Army units, was stranded west of the Yellow River and gradually annihilated by the KMT forces. Since this incident happened after Zhang Guotao made self-criticism about his earlier mistake of "splits," and the West Route Army was participating in a centrally coordinated campaign, Mao should be held partially responsible for its demise for not providing timely relief or reinforcement. Some Fourth Front Red Army leaders complained that Mao was "borrowing a knife (KMT forces) to kill his political enemy (the Fourth Front Red Army)" (*jiedao sharen*). Many Fourth Front Red Army survivors also became the targets of criticism and purges during the Yan'an Rectification Campaign of 1943. For official interpretation of the West Route Army incident, see *ibid.*, pp. 141-143.

the enemy lines. The reduced military pressure on both fronts helped to lower the probability of CCP-CMC leadership bickering over strategies, which contributed to leadership stability. The united front also provided the crucial breathing space for the CCP to build up its bases and forces. Thus when KMT military pressure increased after the Japanese surrender and the breakup of the united front in late 1946, the CCP bases and forces had developed to the point where they became strong enough to contest the KMT offensives. Winning numerous smaller battles contributed further to a changing balance of forces that was increasingly favorable to the CCP, which in turn contributed to a higher level of consensus among the leadership about policy and strategies. This consensus also made it possible to plan and fight decisive campaigns. Winning these campaigns further enhanced the leadership unity.

Table 2.3 Central Military Commission, 1937-1949

Critical Years	Name	Members
August (Outbreak of Anti-Japanese War), 1937	CCP CRMC established at the Politburo Enlarged Conference in Luochuan, Shaanxi	<p>Secretary: Mao Zedong. Deputy secretaries: Zhu De, Zhou Enlai. Members: secretary, deputy secretaries, Peng Dehuai, Ren Bishi, Ye Jianying, Lin Biao, He Long, Liu Bocheng, Zhang Hao, Xu Xiangqian.</p> <p>Wang Jiaxiang was added as deputy secretary in November. Liu Shaoqi was added as deputy secretary, and two commission branches (<i>fenhui</i>) established in March 1943, one in North China to coordinate the 8th Route Army, and the other in Southern China to coordinate the New Fourth Army.</p>
1945, August	New CCP CMC was elected at the 7th Congress, CCP that remain unchanged virtually to the end of civil war in 1949.	<p>Chair: Mao Zedong. Vice chairs: Zhu De, Liu Shaoqi, Zhou Enlai, Peng Dehuai. Members: chair and vice chairs, Chen Yi, Nie Rongzhen, He Long, Xu Xiangqian, Liu Bocheng, Lin Biao, Ye Jianying. Secretary general: Yang Shangkun.</p>

*Adapted from Jiang, *A Dictionary*, pp. 2232, 2279; Liao, *Contemporary China*, p. 322; *China's People's Liberation Army*, p. 341; AMS Military History Department, *Colors Are Fluttering*, pp. 71-72.

The above account does not imply that there were no issues that could have divided the CMC during this period. There was debate in the late 1930s, for instance, on whether protracted guerrilla warfare, if not supplemented by major campaigns, would be sufficient to defeat the Japanese invaders. The annihilation of the New Fourth Army headquarters by the KMT forces in southern Anhui in early 1941 (known as "Southern Anhui Incident," or *wan'nan shibian*) raised questions on whether the united front with the KMT was a good policy. As a result, the three Eighth Route Army divisions were dispersed in separate regions to develop separate bases behind enemy lines. There was a concern of the growth of "mountaintopism" among their commanders, who represented local perspectives and attended CMC meetings as members, which could trigger the tension between the local bases and the central leadership over strategies as had happened in Jiangxi. During the civil war of 1946-49, there were alleged disagreements between Mao and his field commanders on how to conduct local campaigns. There were also instances where units from different field armies clashed with one another. Finally, some suggested that the tension between the commanders and the commissars of the PLA field armies grew to the point that some commanders requested the CCP Central to remove their commissars to reduce political interference in military decisions.¹⁵⁴

These sources of tension and division, however, were marginal if compared to the Red Army period, and they were largely diffused before they became significant to divide the CMC. The "One Hundred Regiments" Campaign of 1940 caused great casualties and loss of bases due to Japanese retaliation, exposed the real strength of the CCP forces, and only temporarily delayed the Japanese march toward southern China. These actions contributed to the consensus on the protracted guerrilla warfare, but not major campaigns, as the correct way to go. The 1941 Southern Anhui Incident may have alerted the top leadership of the need to maintain CCP independence, but not yet to the point for the CCP to end the united front with the KMT, since the cost of the incident was much smaller than the benefit of developing CCP bases and forces under the united front umbrella. The KMT and the Japanese, meanwhile, would devote most of their resources dueling one another. Two CMC regional branches were established in 1943 (see Table 2.3) to improve the coordination between the Yan'an-based center and the local bases. The lack of purges of local commanders may indicate that the center-local relationship was relatively good. One major contributing factor may be that unlike the Jiangxi period where the CCP Central represented the view of Moscow, which may have been largely divorced from the Chinese reality, both the central and local leaders now were "natives" who went through similar experiences and supposedly understood the local conditions well. This understanding helped to mediate the relationship, and reduced the odds of

¹⁵⁴ This point was made by a Mainland China participant at the CAPS/Rand Conference on the PLA as Organization, Airlie House Conference Center, Warrenton, Virginia, August 4-6, 2000.

friction between the center and the local bases.¹⁵⁵ Some PLA historians on the civil war also suggested that unlike the Jiangxi period where the center tried to micro-manage local campaigns through “absolute centralism,” the Mao-led central leadership was careful enough to confine themselves to making sense of the relative significance of various regional campaigns to the general objective and progress of the war, but allow local commanders to use their initiatives in conducting campaigns.¹⁵⁶ This freedom also helped to contribute to the improved coordination between the center and the local bases and forces. While it is true that there were “friendly fire” incidents between units from different field armies at the final stage of the civil war, when warfare became highly mobile and chaotic, such incidents took place at lower levels, and their political significance was not comparable to the “Zhang Guotao Affair” of the Long March. Finally, it may not matter much whether field army commanders liked their commissars or not, since little evidence exists to show that commissars’ interference contributed to bad decisions, and lead to the loss of any particular major campaign. The low technological nature of the PLA and warfare, the Party committee system that served to mediate and integrate decision making, and the generally positive progress of the war may render the impact of the alleged commander-commissar tension on conducting war marginal. Generally speaking, unlike the Red Army period, leadership consensus and stability appeared to be the norm during this period, while division and fragmentation were the exceptions.

1949-1959 Period

The success-based consensus extended to this period. To accommodate Mao’s notion of “new democracy” where the CCP would share power with other political parties in the newly established PRC government, CCP-CMC was replaced by a government-based CMC, which also included non-CCP members (see Table 2.4). The CCP, however, exercised its leadership through several mechanisms. First, “the CCP Central (referring to Politburo) discussed and decided major issues regarding military affairs.” Second, “CCP membership constituted the absolute majority (21 out of 28) in the new government CMC.” Finally, “the system of Party committees at lower levels ensured the Party leadership over the military.”¹⁵⁷ By 1954, however, the CCP CMC was restored to centralize decision making, while a government-based National Defense Commission

¹⁵⁵ The alleged disagreement between Mao and Lin Biao over conducting the Liao-Shen Campaign during the civil war may be exaggerated, since it was revealed only after 1971, and the purpose was to discredit Lin by showing that he was not always Mao’s good pupil, as he had claimed.

¹⁵⁶ See AMS Military History Research Department, *Seventy Years*, pp. 75, 277-278, 290-293, 320-322.

¹⁵⁷ See Li Cheng, *et al*, *Jianguo yilai junshi baizhuan dashi* [One Hundred Major Events in Military History since the Founding of the State], Beijing: Knowledge Press, 1992, pp. 8-9 (hereafter *One Hundred Major Events*).

was established to absorb non-CCP members (see Table 2.4). Also, unlike the relatively decentralized CMC before 1949, where heads of the major field armies and bases were regular members of the CMC, a centralized model was introduced, where membership was confined to the senior PLA leaders and heads of the PLA general departments, services and selected technical arms in Beijing. As a result, heads of the MRs would be informed of central decisions mainly through the CMC enlarged conferences. Moreover, the precedent of chair delegating daily decisions to a senior member responsible for daily affairs was established. Unlike during the war years when a symbiotic relationship existed between Party and PLA leaders, this new relationship symbolized an attempt to create at least a sense of boundary between the Party and the PLA. This would enable the CMC, which was dominated by military members, to focus on military work, while it would allow the chair, who is also the Party leader, to be involved only in major CMC decisions (See Table 2.4).

Table 2.4 Central Military Commission, 1949-1959

Critical Years	Name Changes	Members
October, 1949	People's Revolutionary Military Commission of the Central People's Government (including both CCP and non-CCP members) established	<p>Chair: Mao Zedong.</p> <p>Vice Chairs: Liu Shaoqi, Zhou Enlai, Peng Dehui, Chen Qian.</p> <p>Members: Chair and vice chairs, He Long, Liu Bocheng, Chen Yi, Lin Biao, Xu Xiangqian, Ye Jianying, Nie Rongzhen, Gao Gang, Su Yu, Zhang Yunyi, Deng Xiaoping, Li Xianian, Rao Shushi, Deng Zihui, Xi Zhongxun, Luo Reiqing, Sa Zhenbing, Zhang Zhizhong, Fu Zuoyi, Chai Tingjie, Long Yun, Liu Fei, Lin Biao and Gao Gang were added as vice chairs in November 1951. Liu Bocheng, He Long, Chen Yi, Luo Ronghuan, Xu Xiangqian, Nie Rongzhen, and Ye Jianying were added as vice chairs and Xu Haidong added as a member in June 1954.</p>
September, 1954	CCP CMC restored based on decision of a Politburo conference, and a separate National Defense Commission (NDC) established in the government**	<p>Chair: Mao Zedong.</p> <p>Members: chair, Peng Dehuia (responsible for daily affairs) Zhu De, Lin Biao, Liu Bocheng, He Long, Chen Yi, Deng Xiaoping, Luo Ronghuan, Nie Rongzhen, Xu Xiangqian, Ye Jianying</p> <p>Secretary general: Huang Kecheng</p>

		Deputy secretary general: Xiao Xiangrong, Huang Kecheng, Su Yu, Chen Geng, Tan Zheng, Xiao Jingguang, Wang Shusheng, Xu Guangda, Xiao Hua, Liu Yalou, and Hong Xuezhi were added as new members in November 1956.
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*Adapted from Liao, *Contemporary China*, pp. 322-323; *China's People's Liberation Army*, pp. 341-342.

**The NDC was allegedly a consultative but not a decisionmaking and commanding institution. It was composed of both the CCP and non-CCP members, many of whom were former KMT officers who led their units to defect to the CCP side during the civil war. The First National People's Congress (NPC) of 1954 elected a 81-member NDC chaired by Mao. Liu Shaoqi chaired the NDC of the Second (1959) and the Third (1965) NPC. NDC ceased to exist as Cultural Revolution began in 1966. See Liao, *Contemporary China*, pp. 324-326; AMS Military History Department, *Colors Are Fluttering*, pp. 75-77.

During this period, consensus-based decision making was the norm, particularly with regard to major decisions on new military doctrine, downsizing and reorganizing the PLA, developing research and learning institutions, formulating rules and regulations, and modernizing arms and equipment.¹⁵⁸ Some disagreements, however, did exist among the top CCP-CMC leaders. There were different opinions, for instance, on whether China should intervene in the Korean War, and on strategies to conduct specific campaigns in that war. The 1958 "anti-dogma" campaign led to criticism of Marshal Liu Bocheng (the CMC member responsible for rules and regulations, and education and training) for uncritically accepting the Soviet model. Also, those who wanted to substitute the Soviet style "one-man command" for PLA's "dual-leadership system" (*shuang shuozhang zhi*, referring to the system of shared responsibilities between the commander and the commissar) were criticized.¹⁵⁹ While these contentions laid the basis for the more severe intra-CMC division later, during this period they were still treated as "contradictions among the people," which requires "criticism and self-criticism" to resolve them, but not yet as "antagonistic, class contradictions," where those criticized would be removed from key posts as anti-Party criminals.

1959-1982 Period

This period was characterized by a high level of contention and fragmentation within the CMC. Mao's belief that a "bourgeois line" existed within the CCP, the government, the PLA, and throughout Chinese society following the Peng Dehuai Affair in 1959 led to the accusation of Peng and Huang Kecheng (the PLA chief of staff) for

¹⁵⁸ See AMS Military History Research Department, *Seventy Years*, pp. 449-467.

¹⁵⁹ For "anti-dogmatism" campaign, see *ibid.*, pp. 467-474.

organizing an "anti-Party military club" and their removal from the CMC. As a result, Lin Biao took over as the new CMC vice chair responsible for daily affairs (see Table 2.5). From 1960 to 1965, Lin's policy emphasis on "politics taking command" and fighting "Rightist tendencies" in the PLA met varying levels of resistance from other PLA leaders. These resistance led to Lin's accusation of Tan Zheng (the director of the General Political Department, or GPD) for organizing an "anti-Party clique" by confining political work to literacy education but not ideological work, and Tan's removal from the GPD and the CMC in late 1960. By late 1964, Luo Ruiqing (PLA chief of staff) was accused of representing a "bourgeois military line" for promoting the "great martial competition" (*da biwu*, referring to a PLA-wide program of intensified military training) at the expense of political studies during 1963-64, and subsequently relieved from his positions in the General Staff Department (GSD) and the CMC.¹⁶⁰

The outbreak of the Cultural Revolution in 1966 meant more intensified power struggles within the CMC between those who followed Lin's policy of exposing the "bourgeois military line" by "giving prominence to politics," and those who intended to limit the scope of the Cultural Revolution in the PLA. The outcomes were the persecution of He Long, and the "sweeping aside" of other CMC senior members such as Zhu De, Chen Yi, Ye Jianying, and Xu Xiangqian by early 1967. Xiao Hua (GPD director) was removed from his positions in the GPD and the CMC in July 1967, and Yang Chengwu (acting PLA chief of staff) from his positions in the GSD and the CMC in March 1968 (see Table 2.5). As a result, the CMC, particularly its newly formed and powerful administrative group, was dominated by Lin loyalists such as HuangYongsheng (the new PLA chief of staff), Wu Faxian (PLA Air Force commander), Ye Qun (Lin's wife), Li Zuopeng (PLA Navy commissar), and Qiu Huizuo (director of the General Logistics Department, or GLD) (see Tables 2.5 and 2.6). By late 1970, however, Mao became suspicious of Lin's political ambitions. To balance against Lin's expanding power in the CMC, Mao began to implement a strategy of what he called "mixing sand," by adding non-Lin loyalists to the CMC administrative group (see Table 2.6).¹⁶¹

¹⁶⁰ See *ibid.*, pp. 500, 519-520.

¹⁶¹ *Ibid.*, pp. 555-560.

Table 2.5 Central Military Commission, 1959-1969

Critical Years	Changes	Members
September, 1959	Post-Peng Dehuai Affair Changes	<p>Chair: Mao Zedong Vice chairs: Lin Biao (responsible for daily work), He Long, Nie Rongzhen.</p> <p>Standing Committee: chair, vice chairs, Zhu De, Liu Bocheng, Chen Yi, Deng Xiaoping, Luo Ronghuan (secretary general), Xu Xiangqian, Ye Jianying, Luo Reiqing (secretary general after Luo Ronghuan's death in 1963), Tan Zheng.</p> <p>Members: chair, vice chairs, Standing Committee members, Su Yu, Chen Geng, Xiao Jingguang, Wang Shusheng, Xu Guangda, Liu Yalou.</p> <p>Deputy secretary generals: Su Zhenhua, Xiao Xiangrong. Working Conference (<i>bangong huiyi</i>, established in October under Standing Committee)</p> <p>Members: Luo Reiqing, Tan Zheng, Yang Chengwu, Xiao Hua, Qiu Huizuo, Xiao Xiangrong. Xiao Hua was added as deputy secretary general and Zhang Aiping a member of Working Conference in May 1960. Yang Chengwu was added as deputy secretary general in June 1965. Chen Yi, Xu Xiangqian, Liu Bocheng, Ye Jianying (secretary general) were added as vice chairs in January 1966 and Wang Xinting added as deputy secretary general in March.</p>
1966-1969	Early Cultural Revolution Changes	<p>Many members were allegedly criticized and "swept aside." In March 1967, Xie Fuzhi, Xiao Hua, Yang Chengwu, Su Yu were added as Standing Committee members. In August, a four-man small group was established within CMC, including Wu Faxian (responsible person), Ye Qun, Qiu Huizuo, Zhang Xiuchuan. By September, it became the CMC administrative group (<i>banshi zhu</i>) headed by Yang Chengwu, with Wu Faxian, Ye Qun, Li Zuopeng, Qu Huizuo as members. Li Tianhuan,</p>

Critical Years	Changes	Members
		Liu Jingping were added as group members in October. In March 1968, Huang Yongsheng replaced Yang Chengwu as group leader, with Wu Faxian as his deputy, and Ye Qun, Li Zuopeng, and Qu Huizuo as members. Li Tianyou was added as group member in January 1969.

* Adapted from Liao, *Comtemporary China*, p. 323; *China's People's Liberation Army*, pp. 343-344.

The Lin Biao Affair in late 1971 led to the removal of Lin loyalists from the CMC. This was followed by three developments. First, those who were persecuted during the early Cultural Revolution such as Ye Jianying and Deng Xiaoping were reinstated and became key members of the CMC, Deng, for example, was appointed the new PLA chief of staff. Second, members of the Gang of Four such as Wang Hongwen and Zhang Chunqiao also became key CMC members with Zhang becoming the director of the newly restored GPD. Neither of these two members, however, had previous military experience. Finally, partly due to the expanding role of the PLA in societal politics due to its involvement in the "Three Supports and Two Militaries," and partly due to the need for competing CMC senior leadership factions to mobilize support from below, the CMC became decentralized. Unlike the 1950s when the CMC membership was confined only to senior PLA leaders and heads of the PLA general departments, it was now extended to heads of the MRs. These three developments produced two major effects on the nature and structure of the CMC. First, it rendered the CMC much more heterogeneous and fragmented than before, with its military members (those PLA leaders who were persecuted earlier for representing the "bourgeois military line"), political-military members (those PLA leaders who benefited from the Cultural Revolution), and nonmilitary members (those who had no PLA experience before becoming the CMC members). Second, they contributed to the bloating of the CMC, as membership was now extended to lower levels. Both further exacerbated the factional struggles within the CMC. Even after Hua Guofeng came to power following the death of Mao and the removal of the Gang of Four in late 1976, the CMC continued to remain decentralized, heterogeneous and bloated (see Table 2.6). This may also imply that Hua, who had little influence in the PLA, at least tried to consolidate his position in the CMC by mobilizing support from both below and outside of the PLA in his fateful power struggle against Deng and his followers.

Table 2.6 Central Military Commission, 1969-1981

Critical Years	Name	Members
1969, April	CMC produced at the CCP Ninth Congress	<p>Chair: Mao Zedong Vice chairs: Lin Biao, Liu Bocheng, Chen Yi, Xu Xiangqian, Nie Rongzhen, Ye Jianying. Administrative group: Huang Yongsheng (head), Wu Faxian (deputy head), Ye Qun, Liu Xianquan, Li Tianyou, Li Zuopeng, Li Desheng, Qiu Huizuo, Wen Yucheng, Xie Fuzhi. Members: chair, vice chairs, admin group members, Ding Sheng, Wang Binzhang, Wang Shusheng, Wang Xiaoyu, Wang Huiqiu, Wei Guoqing, Pi Dingjun, Liu Feng, Liu Xinyuan, Xu Shiyu, Chen Shiqu, Chen Xianrei, Chen Xilian, Li Xuefeng, Zhang Dazhi, Zhang Cimin, Zhang Guohua, Zhang Cuncqiao, Yang Dezhi, Du Ping, Xiao Jinguang, Zheng Weishan, Xian Henghan, Yuan Shengping, Liang Xinchu, Zheng Shaoshan, Zheng Siyu, Peng Shaohui, Han Xianchu, Su Yu, Wen Yucheng, Tan Puren, Pan Fusheng.</p> <p>In 1970, Wang Dongxing, Ji Dengkui, Zhang Chaqian, Chen Shiqu were added as administrative group members, the result of Mao's "mixing sand" strategy.</p>
1971, October	Post-Lin Biao Affair	<p>Large numbers of members were criticized as followers of Lin and were removed. The adjustments administrative group was abolished and Working Conference restored, with Ye Jianying, Xie Fuzhi, Zhang Cuncqiao, Li Xiannian, Li Desheng, Ji Dengkui, Wang Dongxing, Chen Shiqu, Zhang Chaqian, Liu Xianquan as Conference members. Ye was responsible for daily affairs. Wang Hongwen was added as Conference member in October 1973. Deng Xiaoping become CMC and Working Conference member in December</p>

		<p>1973, and became CMC vice chair and PLA chief of staff in January 1975. In February 1975, CMC Standing Committee was restored to replace Working Conference, with Ye Jianying, Wang Hongwen, Deng Xiaoping, Zhang Chunqiao, Liu Bocheng, Chen Xilian, Wang Dongxing, Su Zhenhua, Xu Xiangqian, Nie Rongzhen, and Su Yu as members. Ye was responsible for daily work. Li Xiannian and Wang Zhen were added as members later. Ye was dismissed from daily responsibility in February 1976 and Deng was criticized and removed in April 1976. Wang Hongwen and Zhang Chunqiao were removed following Mao's death on October 6, 1976. Hua Guofeng became CMC chair the same month. In March 1977, Ye was restored the responsibility for CMC daily affairs.</p>
<p>July – August, 1977</p>	<p>CMC produced by the CCP</p>	<p>Chair: Hua Guofeng</p> <p>Vice chairs: Ye Jianying, Deng Xiaoping, Liu Bocheng, Xu Xiangqian, Nie Rongzhen.</p> <p>Standing Committee: Li Xiannian, Wang Dongxing, Chen Xilian, Wei Guoqing, Su Zhenhua, Zhang Tingfa, Su Yu, Luo Reiqing (secretary general), Yang Yong (nonvoting, or <i>liexi</i>), Liang Biye (nonvoting), Zhang Zhen (nonvoting).</p> <p>Members: chair, vice chairs, Standing Committee members, Wang Ping, Wang Zheng, Wang Zhen, Wang Bicheng, Wang Shangrong, Wang Jian'an, Deng Hua, Kong Shiquan, Gan Weihai, Lu Zhengchao, Liu Zhen, Liu Zhijian, Xu Shiyong, Du Yide, Yang Chengwu, Yang Dezhi, Li Suiqing, Li Zhimin, Li Desheng, Li Jukui, Li Yaowen, Xiao Hua, Xiao Ke, Xiao Jingguan, Xiao Wangdong, Wu Kehua, Song Shilun, Song Chengzhi, Zhang Chaiqian, Zhang Aiping, Chen Xianri, Chen Zhaidao, Chen Heqiao, Jin Rubo, Hong Xuezhi, Qin Jiwei, Nie Fengzhi, Xu Liqing, Guo Linxiang, Gao Houliang, Tang Liang,</p>

		<p>Huang Xinting, Han Xianchu, Zheng Siyu, Liao Hansheng, Tan Shanhe.</p> <p>In March 1978, Wang Zhen was added as Standing Committee member. In January 1979, Geng Biao was added as Standing Committee member, and became secretary general following Luo Reiqing's death. In February 1979, Wei Guoqing and Yang Yong were appointed as deputy secretary generals. In November 1979, the CMC Working Conference under Standing Committee was restored, nonvoting Standing Committee positions were eliminated, and Wang Ping was added as deputy secretary general. Conference members included Wei Guoqing, Yang Yong, Wang Ping, Wang Shangrong, Liang Biye, Hong Xuezhi, Xiao Hongda. In January 1980, Xu Shiyong, Yang Dezhi, Han Xianchu, Yang Yong, and Wang Ping were added as Standing Committee members. In February 1980, Chen Xilian and Wang Dongxin resigned from CMC. In March 1980, Yang Dezhi succeeded Deng Xiaoping as PLA chief of staff and became CMC deputy secretary general and Standing Committee member. In June 1981, Hua Guofeng resigned as CMC chair, Deng Xiaoping became the new chair, and Yang Shangkun became the Standing Committee member and replaced Geng Biao as secretary general.</p>
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*Adapted from Liao, *Contemporary China*, pp. 323-324; *China's People's Liberation Army*, pp. 344-347.

What then is the nature of the fragmentation within the CMC during this period? Ideological rhetoric of the time and some studies suggest that the division was primarily between political commissars who wanted the PLA to stay politically and ideologically "red," and military commanders who desired expertise-based professionalism, or "whiteness" for the PLA. The reality, however, is more complex than such a simple civil-military dichotomy. People with either commander or commissar experience, for instance, can be found within each of the competing factions of the CMC. A better indicator seems to be the revived historical ties such as the field army system of the civil war period, which really cut across the civil-military boundary. Except for those who existed on the margin of each of the competing factions, Lin Biao's rise to power largely meant that those with Fourth Field Army backgrounds had a much better chance of being

appointed and promoted to important positions,¹⁶² while those with non-Fourth Field Army background were very likely to be accused of representing the "bourgeois military line" and removed from key positions. Paradoxically, the downfall of Lin Biao meant the reverse of political fortunes for the core members of the competing factions.

What then contributed to such severe fragmentation? Mao's belief in a hidden but ever-present "bourgeois line" and the following "witch hunt," certainly triggered the formation and consolidation of competing factions, and the escalation of the balancing behavior between and among them. The escalation in turn damaged the old norms and mechanisms of mediating differences. Small disagreements, for instance, were no longer treated as "contradictions among the people," but rather as "antagonistic contradictions" which warranted severe struggles and purges. As competing factions mobilized support from below and outside and integrated them into the CMC, the old boundaries of the CMC collapsed and its internal quality declined. As the CMC became more heterogeneous and bloated, it became increasingly difficult to build consensus on policy, but much easier to wage ideology-based struggles and purges. For those who had political aspirations, the collapse of the old bureaucratic norms and mechanisms meant that they could no longer count on them for career security and survival, but rather needed to look for alternative, informal mechanisms. It seems that the old, battle-hardened ties such as the field army affiliations offered such alternative, since they helped to enhance the chances of survival in the new environment of political anarchy.

1982-1999 Period

CMC reforms during this period aimed essentially to restore the old norms, mechanisms and boundaries so that the chances of factional bickering could be reduced. First, the old "lines" struggle-based mobilization methods, geared toward weeding out hidden class enemies, were abandoned. In the meantime, bureaucratic norms and mechanisms (to be discussed later) aimed to build consensus on policy were restored. Second, the decentralization model where membership was extended to the MR level commanding officers, was replaced by the centralization model, where CMC membership was accessible only to the PLA senior leaders and the heads of the general departments. These reforms not only reduced the participation of the lower levels in CMC policy deliberations, but also allowed them to focus their attention and energy on implementing policy and on managing their own units. Third, an attempt was made to gradually reduce the political-military and nonmilitary members so that the CMC would be dominated by military members, or those who spent their life and career in the PLA. This change reduced the heterogeneity of the CMC, which in turn made it easier to build consensus, since a commonly shared career experience may contribute to a more uniform institutional outlook on policy (Compare Table 2.7 with Table 2.6 for changes).

These changes have produced some positive results. The old ideology-based factional purges and counter purges become relatively rare. In the meantime, the CMC has been demonstrating a higher level of unity by churning out new policy programs on

¹⁶² Lin was the commander of the Fourth Field Army during the civil war.

PLA doctrine, organization, technology, and education and training. Some may suggest that the ousting of Zhao Ziyang in 1989 and the removal of Yang Shangkun and Yang Baibing in 1992 indicated that the old style purges persisted. These instances, however, are the exceptions. In addition, their removal was not caused by competing agendas on military policy, but rather by disagreements on ways to handle unexpected events such as the student demonstrations in Tiananmen Square.¹⁶³ Moreover, Yang Baibing retained his Politburo position even after his exit from the CMC, which was not comparable to the severe purges of the Cultural Revolution. Finally, the exit of the three represented the removal of the vestige of the political-military and nonmilitary members, which further enhanced the homogeneity of the CMC.

¹⁶³ Zhao was removed from the CMC as a result of the loss of his position as CCP general secretary, and the main reason was his "ineffectiveness" in handling student demonstrations. Though there are various interpretations of the retirement of Yang Shangkun and the removal of Yang Baibing from the CMC, the more plausible reason may be that the two were overly active in suppressing the student demonstrations and took the opportunity to intensify the political activities of the PLA, which was reflected in Yang Baibing's militant "class struggle" rhetoric as the GPD director. Both therefore may be suspected of forming a factional clique, considering that the two are relatives and militant rhetoric usually serves as the strategy for factional mobilization and struggles in CCP history. For Yang Baibing's political activism, see David Shambaugh, "The Soldier and the State in China: the Political Work System in the PLA," *China Quarterly*, No. 127, September 1991, pp. 553-567.

Table 2.7 Central Military Commission, 1982-1999

Critical Years	Name	Members
September, 1982	CMC produced at the CCP 12th Congress	Chair: Deng Xiaoping Vice chairs: Ye Jianying, Xu Xiangqian, Nie Rongzhen, Yang Shangkun (secretary general) Deputy secretary generals: Yu Qiuli, Yang Dezhi, Zhang Aiping, Hong Xuezhi.
November, 1987	CMC produced by the CCP 13th Congress	Chair: Deng. Vice Chairs: Zhao Zhiyang (executive), Yang Shangkun (secretary general) Deputy secretary generals: Hong Xuezhi, Liu Huaqing. Members: chair, vice chairs, secretary generals, Qin Jiwei, Chi Haotian, Yang Baibin, Zhao Nanqi.
November, 1989	Post-Tiananmen Incident CMC	Chair: Jiang Zeming. Vice Chairs: Yang Shangkun (executive), Liu Huaqing. Secretary general: Yang Baibing. Members: chair, vice chairs, secretary general, Qin Jiwei, Chi Haotian, Zhao Nanqi.
October, 1992	CMC produced at the CCP 14th Congress	Chair: Jiang Zemin Vice chairs: Liu Huaqing, Zhang Zhen. Members: chair, vice chairs, Chi Haotian, Zhang Wannian, Yu Yongbo, Fu Quanyou
September, 1997	CMC of the CCP 15th Congress	Chair: Jiang Zemin Vice chairs: Chi Haotian, Zhang Wannian. Members: chair, vice chairs, Fu Quanyou, Yu Yongbo, Wang Ke, Wang Reilin
September, 1999	Pre-16th Congress Adjustments(to be held in 2002)	Chair: Jiang Zemin Vice chairs: Hu Jintao, Chi Haotian, Zhang Wannian. Members: chair, vice chairs, Fu Quanyou, Yu Yongbo, Wang Ke, Cao Gangchuan, Wang Ruilin, Guo Boxiong, Xu Caihou.

*Adapted from Liao, *Contemporary China*, p. 324; *China's People's Liberation Army*, pp. 347-348.

STRUCTURE, NORMS, MECHANISMS, AND RELATIONSHIPS

Structure

The CMC in essence resembles a committee where the CCP and the PLA top leaders meet to make major decisions and to coordinate policy. It is usually chaired by the CCP chair or general secretary. The position of vice chairs is usually limited and confined to the uniformed PLA senior leaders, while other members are the heads of the four PLA general departments. Even though the CMC does not claim to have a hierarchy, certain factors affect the relative power among its members. Since the CMC is a Party institution and all CMC members are Party members, those who hold position in the CCP Politburo may be regarded as more powerful than others, and those who hold position in the Politburo Standing Committee should be seen as even more powerful. Within the CMC itself, chair and vice chairs, who constitute an informal executive committee,¹⁶⁴ are certainly seen as more senior and more powerful than the other members. Among the other members, those who hold position of the full heads of the general departments are regarded as more powerful than those who hold position of the deputy heads of these departments. Furthermore, those who hold position of the full heads of the GSD and GPD are considered more powerful than those who hold the position of the head of the GLD, since the former are recognized as more important departments.¹⁶⁵ Some sources suggest that the newly established General Armament Department (GAD) may reflect a new emphasis on technology, which may render its head equal status with the heads of the GSD and the GPD. But since GAD is relatively new and a supportive department, it probably has the status of the GLD. Military ranks used to be an important factor in determining the relative importance of members (marshals vs. generals). But since all current uniformed members are generals, ranks may not be as an important indicator as before, even though levels of salary (which is determined by the length of military service, an indicator of relative seniority, as well as by ranks) may be an influential factor.

There have been historical exceptions to the current, more regularized CMC structure as described above, particularly during the political turmoil of the Cultural Revolution, and even thereafter. From 1982 to 1989, for instance, Deng was neither the CCP chair nor its general secretary, but he held the position of the CMC chair, while the CCP general secretary Zhao Ziyang, who should have been the CMC chair, only held the position of the CMC vice chair (see Table 2.7). Moreover, those who had little PLA service experience or who left the PLA for civilian positions since the late 50s, such as Deng (from 1975 to 1976 and from 1977 to 1982), Wang Hongwen (from 1975 to 1976), Zhao Ziyang (from 1987 to 1989), and Hu Jintao (from 1999 to present), held or holds the position of the vice or first vice chair of the CMC (see Tables 2.6 and 2.7). While it is understandable that the "core in waiting" needs to have prior CMC tenure to gain military experience and to cultivate relationship and authority within the CMC and the PLA, some

¹⁶⁴ Swaine, "The PLA and Chinese National Security Policy," p. 119.

¹⁶⁵ A deputy PLA chief of staff or a deputy GPD director is equivalent to a full GLD director in level distinction.

regularized norm may be necessary to enhance the legitimacy of such succession-related practice. If Hu Jintao succeeds Jiang as the CMC chair at the same time as he would become the new CCP general secretary, his prior tenure at the CMC may establish a precedent that may serve as a normative mechanism of political-military succession. But if Hu takes over the position of the CCP general secretary at the 16th CCP Congress to be held in 2002, while Jiang continues to hold the position of the CMC chair, as Deng did earlier relative to Zhao, the attempt to normalize the political-military succession would be seriously hampered. This line of succession is unusual because holding the CMC chair position without being the CCP general secretary would be perceived as being abnormal and irregular, even according to the CCP's own past practice and norm.

Another exception to the current structure is appointing a uniformed senior member or a uniformed vice chair to be responsible for daily affairs (Peng Dehuai from 1954 to 1959, Lin Biao from 1959 to 1971, and Ye Jianying from 1971 to 1976 and from 1977 to 1982), or a standing (*changwu*) vice chair (Yang Shangkun from 1982 to 1989) (see Tables 2.4, 2.5, and 2.7). Related to this exception is appointing a secretary general to assist the vice chair responsible for daily affairs in managing his daily tasks (Huang Kecheng from 1954 to 1959, Luo Ronghuan from 1959 to 1963, Luo Ruiqing from 1963 to 1965 and from 1977 to 1979, Geng Biao from 1979 to 1981, Yang Shangkun from 1981 to 1989, and Yang Baibing from 1989 to 1992. See Tables 2.4, 2.5, 2.6, and 2.7). These arrangements, however, are usually seen as concentrating power either in the hands of these two members, or in the hands of one member (if both positions are occupied by one person, as Yang Shangkun did from 1982 to 1989. See Table 2.7). This in turn may lead to a perception of the declining influence over policy by the civilian chair and other members. Since these two members usually work closely together, they may also be suspected of forming a clique (Peng Dehuai and Huang Kecheng from 1954 to 1959, and Yang Shangkun and Yang Baibing from 1989 to 1992). Both may generate a sense of insecurity and anxiety about one's relative power among other CMC members. Sometimes, however, the two may not get along well, either due to fear of being suspected of forming a clique or for ideological differences (as had happened between Lin Biao and Luo Ronghuan from 1959 to 1963, and between Lin Biao and Luo Ruiqing from 1963 to 1965), leading to severe rivalry between the two at the expense of policy. Since these two positions may contribute to the "relative gain" problem in the CMC and trigger preemptive power struggles, both were eliminated in 1992 to reduce factionalism.

There are other exceptions to the current structure. When the CMC grew rather large, for instance, a standing committee would be established (from 1959 to 1966, and from 1975 to 1982. See Tables 2.5 and 2.6) to differentiate the more senior and influential members from others with the standing committee itself differentiated between voting and nonvoting members (from 1977 to 1979. See Table 2.6). Related to the standing committee is the working conference, which was established either as the mechanism to interpret and operationalize the standing committee decisions (from 1959 to 1966, and from 1979 to 1982. See Tables 2.5 and 2.6), or as a substitute for the standing committee (from 1971 to 1975. See Table 2.6). Moreover, from 1966 to 1971, the heyday of the Cultural Revolution, both the standing committee and the working conference were replaced by a powerful CMC administrative group. Finally, specialized committees were sometimes established within the CMC to manage functional and technical tasks (in military training and education, science and technology, etc.). These arrangements

produced several negative effects. First, they turned the CMC into an overly stratified or compartmentalized bureaucracy, making it difficult to build consensus on major decisions and to coordinate policy. Moreover, they contributed to an excessively uneven distribution of power, which may have caused the relative gain-driven spiral, leading to intense factional rivalry. Furthermore, some extra-institutional arrangements, such as the administrative group, can easily be turned into the tool of intra-CCP power struggles.¹⁶⁶ Finally, specialized committees tended to micromanage tasks that were the responsibilities of the PLA general departments, making it difficult for either to fulfill its tasks due to blurring of bureaucratic ranks. Largely for these reasons, these arrangements have gradually been phased out.

Major Norms and Mechanisms

For the CMC to make decisions and coordinate policy, there are two major norms that provide context and guideline. First, the line changes of the CCP Central, which are usually related to leadership changes and a reevaluation of China's internal and external environment, provide the context within which military policy would be formulated or changed. "Early, total, nuclear war," for instance, was largely identified with the radical Maoist line of "war and revolution." As CCP line shifted toward "peace and development" under Deng, the notion of "local war under modern conditions" was articulated and adopted. Moreover, bureaucratic incrementalism provides an important norm for decision making. With the restoration and consolidation of the bureaucracy in the post-Mao era,¹⁶⁷ military policy has become less erratic and more incrementalized. Personnel appointments, for instance, are less determined by competing definition of ideological correctness and more by bureaucratic requisites such as service length, performance, and education.¹⁶⁸ Similarly, decisions on budget and weapons acquisition are less based on revolutionary zeal-driven and unrealizable targets and more on feasibility factors such as how much was spent the previous year; spending relative to government budget, annual economic growth, and the annual gross domestic product (GDP); availability of suppliers; and cost-benefit ratio.¹⁶⁹

While major norms set the parameters for which debate and consensus on major decisions take place, at the operational level the CMC General Office (GO) is an

¹⁶⁶ Most Lin loyalists in the CMC administrative group also served in the CCP Politburo, and were both active participants and victims in the intra-CCP "lines" struggle of the time.

¹⁶⁷ See Nan Li, "Organizational Changes of the PLA," *China Quarterly*, No. 158, June 1999.

¹⁶⁸ *Ibid.*, pp. 330-331.

¹⁶⁹ For detailed discussion of budgetary processes, see Ku Guisheng, *et al.*, *Junfei lun* [Theory of Military Budget], Beijing: National Defense University, 1999. For discussion of weapons acquisition, see Sun Haiyang, *et al.*, *Junpin lun* [Theory of Military Product] Beijing: Arms Industry Press, 1997.

important mechanism for the CMC to fulfill its roles.¹⁷⁰ As the PLA has shifted to more quality-based and technology-driven modernization, policy issues also require more sophisticated technical analyses than before. As a result, the GO's Comprehensive Investigation and Research Bureau (CIRB) is playing an increasingly important role in providing such analyses. This analysis is usually done in three major ways. The CIRB's own research staff conducts its own investigation, research and analyses on major policy issues. Moreover, the CIRB can assign specialized research projects to other PLA research institutes such as the Academy of Military Science (AMS), the National Defense University (NDU), and the general departments, services and MR-affiliated research institutions, or collect and aggregate inputs from these institutions on policy issues. Finally, the CIRB's research staff can be integrated into a drafting group that attempts to tackle larger, more comprehensive policy subjects.¹⁷¹

The CMC currently consists of the heads of the four PLA general departments so that the relationship among operations, personnel, arms and technology, and finance and logistics can be coordinated, since the four departments are also considered the operational departments (*gongzuo bumen*) of the CMC. There are, however, newly emerging issues that transcend the functional responsibilities of the four general departments, which require central coordination at the CMC level. As a result, specialized bureaus were established and placed under the GO for the purpose of policy coordination. The Rule of Law Bureau, for instance, came into being largely as an attempt to coordinate the numerous newly formulated rules and regulations that transcend the functions of the four general departments and encompass all aspects of the PLA. The Auditing Bureau, on the other hand, was established as a device to impose some central financial discipline through auditing the budgetary expenditures as well as non-budgetary income, largely the

¹⁷⁰ Since the early 1950s, the CMC and its GO had been located in the relatively small Sanzuomen compound, which is close to the back entrance of Zhongnanhai (CCP Central) and the front gate of Beihai Park, and contains a small auditorium (well known for showing internally circulated foreign movies in the 1970s) and a few conference rooms and offices. Both have recently moved to a newly built, rather large building next to the Military Museum on western Chang'an Avenue, known as the "August 1st Building." Swaine estimates that the CMC GO has about 100 full time staff. See Swaine, "The PLA and Chinese National Security Policy," p. 120.

¹⁷¹ Senior Colonel Hu Hanlin, the CIRB director, served as deputy head of a drafting group for the book entitled *Contemporary World Military Affairs and China's National Defense*. The group consisted of 17 analysts and scholars from the CIRB, AMS, and NDU. Other group heads included Major General Li Yu (full head, former director of AMS' Scientific Research Guidance Department) and Major General Su Xisheng (deputy head, deputy dean of NDU). The chief editor is General Zhang Wannian, and the deputy chief editors are Generals Liu Jingsong (former AMS commandant) and Xing Shizhong (NDU commandant). The CCP Central leadership allegedly instructed the CMC to draft the book as the military component of a textbook series for CCP's Central Party School. See Zhang, *Contemporary World Military Affairs*, p. 363.

outcome of extensive involvement in business by lower level departments and units. Similarly, the Military Trade Bureau was established as an attempt to centralize and coordinate policy over foreign arms sales, which may have foreign policy implications (see Table 2.8 for various GO bureaus). The PLA Disciplinary Inspection Committee and the PLA Confidentiality Committee were also established within the CMC for policy coordination in their respective functional areas (see Table 2.8).

Table 2.8 CMC General Office (*junwei bangongting*)

<p>Major Subordinate bureaus: Secretariat (<i>mishu chu</i>), Comprehensive Investigation and Research Bureau (<i>zonghe diaoyan ju</i>), Rule of Law Bureau (<i>fazhi ju</i>), Auditing Bureau (<i>shenji ju</i>), Military Trade Bureau (<i>junmao ju</i>).*</p>
<p>* The GO Services Department (<i>fuwu chu</i>) and the Guard Department (<i>jingwei chu</i>), responsible for logistical services and security of the CMC, are not listed here since they are not considered major functional departments. The GO is usually directed by a Lieutenant General (Tan Reixin is the current director), who is assisted by several deputy directors who hold the rank of major general. Bureau heads are either major generals or senior colonels. Also associated with the CMC are the PLA Disciplinary Inspection (<i>jilu jiancha</i>) Committee and the PLA Secrecy (<i>baomi</i>) Committee, which are parallel but not subordinate to the GO. The CMC Transportation and War Preparation Leading Small Group and the CMC People's Arms Committee were abolished and their functions were transferred in late 1994 to the newly established State National Defense Mobilization Commission (to be discussed below).</p>

The major function of the GO's Secretariat in decision making and policy coordination is the indispensable dissemination of information among CMC members to facilitate agendas. The Secretariat maintains routine communications with the CCP Central General Office for major policy initiatives from the CCP leadership. It also gathers and collates materials from other GO bureaus and PLA lower level departments and units, and circulates them through personal secretaries to CMC members in summaries.¹⁷² Both help in shaping the agendas for the CMC meetings. Some scholars of

¹⁷² The materials coming down from the CCP Central are usually instructions (*zhishi*, referring mainly to those handed down from superiors to subordinates). Materials from lower levels are mostly requests for instructions (*qingshi*) or reports (*baogao*). The CMC members can make comments on reports to be returned to lower levels (*pishi*) or issue direct *zhishi* to lower levels. The speech given by the CMC members in smaller meetings (such as a symposium) is *fayan*. The speech given in front of a larger audience at an enlarged CMC conference is *jianghua*, which can also be called a *baogao*. Policy

Chinese politics suggest that rather than serving merely as conduits, personal secretaries of major leaders can substantially influence policy agendas. Such a view may be historically relevant. Some personal secretaries, being well versed in ideological doctrines, for instance, acted on behalf of major CCP leaders and directly participated in drafting key policy documents. These actions contributed to many "lines" struggles in CCP history and lead to severe factional purges and counter purges. In such struggles, close relations are also easier to forge between the leaders and their personal secretaries. This means that the rehabilitation and purge of major leaders also implies the rise and decline of political fortunes of their personal secretaries, which in turn lead to either their appointment to more important positions than their credentials warranted (where they would push the policy view of their leaders at the expense of others'), or their removal from important positions.¹⁷³

The influence of personal secretaries over policy, however, may be declining in the post-Mao era for several reasons. The new emphasis on technical and functional expertise, for instance, means the decline of ideology in policy formulation. Since few personal secretaries are technical and functional experts who can provide sophisticated policy analyses, the CMC and the PLA technical and functional bureaus and departments should have more input into the policy processes than personal secretaries. Furthermore, post-Mao bureaucratic routinization means the decline of the personality-based purges, counter purges, and rehabilitation. Finally, the perception of personal secretaries benefiting from their personal bond with leaders for career advancement may mean that both leaders and personal secretaries would maintain appropriate distance from one another to avoid the perception of favoritism and that personal secretaries would be more regularly transferred to lower levels to gain "grassroots unit work experience" and competence before promotion. All these actions should reduce the conditions for forming highly personalized cliques, and therefore curtail the policy role of personal secretaries.¹⁷⁴

options discussed at CMC meetings are plans (*fang'an*). A final decision (*jueding*) is usually a resolution (*jueyi*). *Zhishi* and *jueyi* are usually distributed as documents (*wenjian*) with four levels of classification: top-secret (*juemi*), essential-secret (*jimi*), secret (*mimi*), and internal (*neibu*).

¹⁷³ Such ups and downs can also happen to family members and relatives, and even to bodyguards, chauffeurs, and chefs. Such practice can trace its origin to the palace intrigues of the imperial times. Understanding such historical continuity, however, is beyond the scope of this study and requires a separate analysis.

¹⁷⁴ Chen Boda, Mao's former personal secretary, was a CCP Politburo Standing Committee member and the head of Cultural Revolution Leadership Small Group. Wang Reilin, Deng's former personal secretary, has become a CMC member and a GPD deputy director. Jia Ting'an, Jiang's former personal secretary, only holds the position of the deputy director of CMCGO. Chen was also purged from the CCP leadership in 1970. These show that the political role of personal secretaries is declining and that personal secretary experience is no guarantee for political protection from the boss that the

As far as major meetings are concerned, CMC "meets ... at least once per month" in so-called routine sessions (*lihui*), and "at least twice per year" in sessions that are usually enlarged to include the MR level commanding officers (*kuoda hui*).¹⁷⁵ To the extent the CMC resembles the Party committee of the PLA,¹⁷⁶ the official norm that guides decision processes at these committee meetings (which applies to Party committees at all levels of the PLA) is a "system of division of responsibilities among commanding officers under the unified and collective leadership of the Party committee" (*dangwei tongyi jiti lingdao xia de shouzhang fengong fuze zhi*). Such a norm involves three key principles. The first is the unity principle, which means that all commanding officers, whether military, political, logistics or equipment, are subordinate to the leadership of the Party committee of their unit, and all *important* issues would be resolved and decided by the Party committee. The second is the collectivism principle. This principle first of all means that major issues would be fully discussed and "all committee members air their views and make suggestions." Secondly, "except for emergencies where a key commanding officer acts promptly at his own discretion (*jiduan chuzhi*)," major policy issues should be put to a vote (*biaojue*) at committee meetings where "one man has one vote" and "the minority would subordinate their view to the majority," but not left to the "arbitrary will" of a single leader. "If the result of voting is too close or arguments break out, the decision can be postponed for another vote, while further investigation and research and exchange of views would take place and the minority view reviewed carefully. Under special circumstances, the issue can be forwarded to a higher level for arbitration." The third is the division of responsibilities principle, which has two major elements. The first element is that once a policy decision has been made, a division of labor among members should be clarified (*mingque fengong*), so that each would fulfill his/her responsibility (*gesi qize*) in implementing policy.¹⁷⁷ Secondly, to prevent excessive separation of responsibilities, members are

secretary used to serve, even though the boss is very much in power. Moreover, some of those with personal secretary experience can be quite competent and deserve important jobs in spite of such experience. This also means that such experience can be a political liability, since one with such experience may be suspected of favoritism and denied important appointments, even though the person can be quite competent and qualified.

¹⁷⁵ Swaine, "The PLA and Chinese National Security Policy," p. 119. For a sample of major CMC enlarged conference decisions over the years, see Tables 9 and 10.

¹⁷⁶ The CMC is more similar to the Party committee of a provincial military district (MD), where the civilian provincial first Party secretary serves as the first secretary while the MD commander and commissar serve as secretaries, than the Party committee of a group army, where the first secretary is a uniformed commanding officer (either the commander or the commissar of the unit).

¹⁷⁷ In the case of the CMC, a major policy decision (such as the 1985 PLA downsizing and reorganization) usually involves an operational component, a personnel component, and arms and technology component, and a financial and logistical component, which match well with the functional responsibilities of the four general

supposed to cooperate through mutual respect, support and consultation, so that policy would be successfully executed.¹⁷⁸

To what extent is such an official norm regularly practiced, particularly in terms of voting at the CMC meetings? There are certainly benefits and incentives from voting on major issues. Votes can be recorded, thus contributing to clarification of positions and responsibilities.¹⁷⁹ It also enhances the legitimacy of a policy if a majority has voted for it. Moreover, it reinforces the official norm by setting an example for lower level Party committees. Finally, establishing a nonvoting category of CMC membership briefly (see Table 2.6) and extensive literature on Party committee meeting procedures imply that CMC, like Party committees at lower levels, should vote. On the other hand, there are downsides of formal voting. Existence of a significant minority against a policy may raise questions about its soundness, leading to reevaluation and delay of a final decision. This may contribute to prolonged discussions without a resolution (*jiuyi bujue*), thus lowering the credibility of the CMC. Heated arguments and split votes may also evoke the memory of the Cultural Revolution, where small agreements were elevated to the level of "lines" struggle, contributing to severe factional rivalry. Finally, if the more senior members voted on the losing side, their authority and legitimacy may be negatively affected. In a culture that values "face" highly, such a prospect may trigger hasty face-saving measures at the expense of sound policy.

Several mitigating strategies and mechanisms exist to minimize the chances and negative effects of formal voting, which may amount to an embarrassing showdown. First, Party committees are required to focus on "significant and major policy issues" (*zhongda zhengce wenti*) and not on administrative issues, in order to avoid "the administratization of the Party committee" (*dangwei xingzhenghua*). This means that Party committee meetings must not mix with "commanding officer meetings" (*shouzhang bangong huiyi*). While the former concentrates on fewer but more important issues based on the collectivism principle of "minority yielding to majority" (*shaoshu fucong duoshu*) through voting, the latter deals with more numerous and trivial administrative matters based on the principle of "lower levels obeying higher levels" (*xiaji fucong shangji*) through issuing and following orders. It also means that "Party committees should not take on (*baolan*) administrative matters, substitute for (*daiti*) administrative officers, and interfere in (*ganyu*) their routine exercise of responsibilities; but should support them in

departments. This apparently allows the two CMC vice chairs, General Zhang Wannian and General Chi Haotian, to preside over the heads of four general departments to coordinate and supervise the implementation of policy. It is also safe to assume a division of general responsibilities between the two. General Zhang, for instance, has reportedly been responsible mainly for operational matters, while General Chi is largely responsible for other major matters.

¹⁷⁸ For the three principles, see Yan, *Theory and Practice*, pp. 18-21, 40-41; Liao, *et al*, *Contemporary China*, p. 55.

¹⁷⁹ I am indebted to Admiral Michael McDevitt for this observation.

carrying out their responsibilities independently.”¹⁸⁰ Both should help to reduce the number of issues to be decided at the Party committee meetings.

Second, for those issues that find their way to the agendas of the Party committee meetings, many, such as arbitration of disagreements and coordinating implementation of policy at lower levels, may not require a formal vote. The restoration of a bureaucratic hierarchy may mean that higher level officials tend to take a unified stance in dealing with issues arising from lower level units. This is a significant departure from the bureaucratic breakdown of the Cultural Revolution, where officials of lower levels can exploit the cleavages at higher levels or *vice versa* to develop vertical, highly personalized factions that cut across bureaucratic ranks. The Party committee can also transmit (*zhuanfa*) the reports from the functional departments of its level to lower levels. These reports may not require a formal vote at Party committee meetings, but they do imply a tacit approval of the policy initiatives in such reports by commanding officers.¹⁸¹ Moreover, some issues, particularly those concerning long-range planning are regularly discussed at these meetings (a mediating process by its own right) and do not require a final decision based on a formal voting. Arranging for next year's work also may not require a formal vote. All these mechanisms should further reduce the number of issues to be decided through a formal vote.

Finally, major informal mechanisms exist to mediate between Party committee members about major policy issues. It is advised, for instance, that committee members “should be informed of the agendas in advance” (*anmin gaoshi*), so that they are “well prepared to discuss these issues” (*youbai eryi*) at the meetings. Also, “based on thorough investigation and research, two or more plans should be forwarded at the meetings so that there will be choices to make.” Moreover, it is necessary to have “more communication, coordination, and solicitations of views to unify thought (*tongyi sixiang*) before meetings.” This serves “to avoid either delay or hasty decisions” at the meetings. Informal mechanisms of exchanging views include “early notice” (*da zhaohu*), passing on circulating documents (*fa chuanyue jian*), symposiums (*zuotan hui*) and briefings (*pengtou hui*) among commanding officers, and transition meetings (*jiaojieban hui*), even

¹⁸⁰ Yan, *Theory and Practice*, pp. 18, 41; Yu Jingchang (commissar of Heilongjiang Provincial MD), “*Dangqian renwubu dangwei jianchi minzhu jizhongzhi ying zhaoli jie jue de jige wenti*” [Several Current Issues That Should be Emphatically Resolved Regarding Adherence to the System of Democratic Centralism by the Party Committees of the People's Arms Departments] in *National Defense* Editorial Department, ed., *Weile daying mingtian de zhanzheng* [In Order to Fight and Win Tomorrow's War], Beijing: National Defense University Press, 1999, military circulation only, p. 88 (hereafter “Several Current Issues”).

¹⁸¹ The CMC, for instance, transmitted to lower levels *The Report on Several Issues concerning the Authorized Strength of Military Schools*, forwarded by the three general departments in 1975. It also transmitted *The Plan on Reforming and Streamlining the System of Military Schools*, forwarded by the three general departments in 1986. Li, *One Hundred Major Events*, pp. 53-54.

though these informal mechanisms "must not substitute for the Party committee procedures and resolutions."¹⁸² All these strategies and mechanisms should either lower the need for a formal vote at Party committee meetings, or reduce such voting to a mere formality.¹⁸³

Relationships

The CMC maintains important relationships with the CCP Central, government institutions, and lower level PLA departments and units. Among these, the most important relationship is with the CCP Central. During the Cultural Revolution, the CMC's relationship with the CCP Politburo was highly intertwined and symbiotic, with about 50% of the Politburo members being uniformed PLA officers, and a substantial proportion of the CMC membership being nonmilitary and political-military members. Such a symbiosis reflected both the earlier political-military revolutionary experience and Mao's emphasis on "politics to take command" during the Cultural Revolution. Because of this, intra-Politburo "lines" struggle-based factional rivalry would easily extend into and divide the CMC, which cut across the civil-military divide between the Politburo and the CMC (the Gang of Four and Lin Biao and his generals in CMC on the one side, and Liu and Deng and the marshals in the CMC on the other). The post-Mao years witnessed the gradual decline of uniformed PLA members in the Politburo to two out of 21 members, and neither of the two serves in the powerful Politburo Standing Committee. In the meantime, nonmilitary and political-military members in the CMC have been substantially reduced: with the exception of the chair and the "core in waiting," all members are uniformed PLA commanding officers.¹⁸⁴ The institutionalization of a nominal civil-military boundary between the Politburo and the CMC means that the PLA role in intra-Party leadership politics is reduced as military votes in the Politburo declined substantially. It also means that the CMC, no longer distracted by intra-Party leadership "lines" struggle, can now focus more on the functional and technical issues of defense modernization, as it is now dominated by the uniformed PLA commanding officers.

However, such nominal civil-military differentiation may also mean that the CMC increasingly resembles a lobbying group that actively articulates the PLA's institutional interests in the policy arena of the Party. The similarity is particularly evident if the Party moves away from the old revolutionary, one-person dominant, charismatic leadership toward a more technocratic and collective leadership, sustained more by consensus-driven collective bargaining and accommodations than the arbitrary will of one person. For the CCP leadership, while it may continue to accommodate the PLA interests if they are

¹⁸² Yu, "Several Current Issues," pp. 88-89; and Yan, *Theory and Practice*, pp. 22-23.

¹⁸³ These probably lead one analyst to state that "the CMC as a body reportedly does not meet to vote and 'make decisions' in the conventional sense." Swaine, "The PLA and Chinese National Security Policy," p. 119.

¹⁸⁴ See Li, "Organizational Changes of the PLA," pp. 317-318, 320-321.

perceived as reasonable and justified, it may also attempt to restrain excesses by stressing the Leninist principle of "Party commanding the gun" to remind the uniformed CMC members that CCP Politburo is still its parent organization, and that the CMC functions and formulates policies only within the basic principles and policy framework of the CCP leadership; and by limiting the number of uniformed members in Politburo and its standing committee. Also, since CMC members are more like Party members who wear uniforms than professional officers who hold a party card,¹⁸⁵ the uniformed CMC members would most likely hold on to the same Leninist principle by articulating a view where pursuing functional and technical expertise and institutional interests would not be inconsistent with Party principles and objectives.¹⁸⁶

Such a mutually accommodating and cordial relationship, coupled with a measure of restraint, can also be detected at an operational level. The CCP Secretariat, which is responsible for managing CCP central bureaucracies, operationalizing Politburo decisions, and supervising their implementation, for instance, retains at least one uniformed CMC vice chair on its board, as does the CCP Foreign Affairs Leading Small Group (FALSG), which is responsible for discussing and coordinating foreign policy and supervising its implementation.¹⁸⁷ The single uniformed membership allows for military input into policy as well as civil-military coordination in policy implementation. It also serves to accommodate the institutional perspective and interests of the PLA. On the other hand, limiting military membership to no more than one is apparently intended to restrain the PLA leadership from exerting too much influence over policy.

As for government institutions, the CMC interacts mainly with the NPC and the State Council. The 1982 Constitutional change requires the formation of a state CMC that answers to the NPC, implying that legislative oversight would be exercised over military affairs. In reality, however, the state CMC is identical with the CCP CMC in organization and membership, and its loyalty apparently goes to where real power lies: the CCP

¹⁸⁵ This means that the PLA officers are Party members first and professional officers second, and that the PLA is still a Party army with professional characteristics, but not otherwise. Hopefully, however, increased professionalism would gradually build up professional identity and weaken Party identity to the point the latter becomes irrelevant.

¹⁸⁶ The current PLA-CCP leadership interaction is confined mainly to mundane bureaucratic politics such as defense budget increases to compensate for losses due to business divestiture, or to augment PLA technology. The probability for the PLA leadership to play the direct and blatant role of kingmaker in CCP leadership politics is relatively low, unless an acute CCP leadership crisis occurs on the scale of the Cultural Revolution or the 1989 Tiananmen Incident. This does not mean, however, the PLA leadership has no role to play in CCP leadership transition politics. Some behind-the-scene political-military negotiations about CCP leadership transition in the upcoming 16th CCP Congress, for instance, can be expected to have already been going on.

¹⁸⁷ General Zhang is a member of the CCP Secretariat, and General Chi is a member of FALSG.

Central. This change, however, doesn't mean that legislative hearings would not take place. As a matter of fact, the policy area where the NPC holds the most regular hearings is military rules and regulations. In such hearings, the CMC entrusts the head of the GPD to report and explain to the NPC in detail the newly formulated rules and regulations, which the NPC regularly approves. Hearings are also held on the more substantial policy area such as the defense budget, where the CMC delegates the head of the GLD the responsibility to report and explain. Such hearings, however, tend to dwell more on general principles and large figures than on spending details. As claimed in one account on the budgetary process:

In countries such as the US, France, England, and Russia, the defense department (or ministry) is both the highest leadership institution of the armed forces and the functional department of the government (or cabinet). It participates in drafting the defense budget on behalf of both the armed forces and the government. In order to get approval from the legislature, the drafted budget needs to be as detailed as possible. Once approved, the budget is strictly executed ... The decision making power (*juece quan*) of the defense department itself in distributing and managing budget is highly constrained (by the legislature and chief executive)... The highest leadership institution of our army is the CMC. The CMC is not a subordinate functional department of the government. Like the State Council, it is produced by the institution of the highest state power (implying the CMC parallels the State Council in level distinction, but is not a subordinate department within the State Council). Such a relationship between the CMC and the government determines that the CMC has much more decision making power in distributing and managing the defense budget than the defense departments in other countries. The NPC is only responsible for examining and approving (*shenpi*) the general figures of this budget. The CMC has the highest decision making power in detailed distribution and management.¹⁸⁸

The most secretive and the least area of oversight is the PLA's personnel policy. The CMC makes major decisions about high level personnel appointments and promotions in the PLA. The list of candidates is prepared out of the nomenclature maintained by the GPD's Cadre Department and the CCP's Organization Department. The final decisions would be reported to the CCP Politburo for the record (*shangbao bei'an*), which would then be kept by the CCP's Organization Department. There is virtually no news report on

¹⁸⁸ Ku, *Theory of Military Budget*, pp. 190-191.

such decisions except for ceremonies where the CMC chair promotes high-ranking PLA officers.¹⁸⁹ This decision process is off limits to the NPC.

Even though one uniformed CMC vice chair holds the position of the defense minister (in this case General Chi), his power comes with the position of CMC vice chair, but not the head of a Ministry of National Defense (MND), since the MND is a public relations facade which does not exist within the State Council. The regular functions of the MND are fulfilled by the four PLA general departments, which answer to the CMC, but not the premier of the State Council.¹⁹⁰ As a result, the executive control of the military through the supervision of a defense department or ministry in his or her cabinet does not exist in China. This does not mean that the relationship between the CMC and the State Council has to be conflictual. On the contrary, the relationship among the uniformed CMC vice chairs and the premier and vice premiers of the State Council can be highly civil and cordial, since they are mostly CCP Politburo members or members of the CCP Secretariat, and do meet often in the regular meetings of these councils. The uniformed CMC vice chair who holds the position of defense minister is also a State Councilor. Below the top level, however, the relationship between the State Council ministries and the PLA general departments can sometimes be problematic, particularly in policy coordination. In recent years, for instance, the PLA general departments and other PLA major institutions have had serious disputes with the Ministry of Foreign Affairs of the State Council over major foreign policy issues.¹⁹¹ Since the State Council premier has no jurisdiction over lower PLA institutions, such conflicts need to be forwarded to the Party leadership for mediation and arbitration. The outcome can be quite unpleasant for either the CMC or the State Council, thus potentially undermining future cooperation and coordination between the two.

To limit such disputes, an attempt has been made to institutionalize two major mediating mechanisms. The first is a "system of coordination conferences" (*xieshang huiyi zhidu*), where "coordination conferences between the State Council and the CMC would be held depending on circumstances, to resolve issues concerning national defense matters." Moreover, "the State Council and the CMC would organize implementation of the decisions made at such conferences within each's realm of responsibilities and power." The second mechanism is the State National Defense Mobilization Commission established in November 1994. This is "a discussion and coordination (*yishi xietiao*) institution responsible for national defense mobilization work under the leadership of the State Council and the CMC." The positions of chair and vice chairs of the commission are "held by the principle leaders of the State Council and the CMC." Its members "include leaders of the related State Council ministries and commissions, and of the PLA general departments." The four major offices (people's arms mobilization, economic

¹⁸⁹ Gaining higher rank implies promotion to higher positions, but it does not tell what positions. Such ceremonies also seem to be a purely internal CMC process (e.g., Jiang handing out new ranks to his top lieutenants).

¹⁹⁰ See Li, "Organizational Changes of the PLA," pp. 322.

¹⁹¹ Ibid.

mobilization, people's air defense, and transportation and war preparation) under the commission are also staffed by both State Council and PLA personnel.¹⁹²

The CMC's relationship with lower level PLA operational departments and units is related to the important question on whether the CMC has sufficient autonomy to make its own policy decisions. There are two views on this. One is that the CMC largely ratifies decisions of the CCP Politburo. The other view is that most CMC policy ideas come from lower levels, and the CMC largely stamps its approval on these ideas.¹⁹³ Both views assume the CMC is mainly a coordinating and mediating institution, which does not normally make major policy decisions of its own. Such an assumption was relevant mainly to the period between the late 1950s and middle 1970s, when the PLA was highly revolutionized, the military hierarchy severely weakened, and the CMC highly divided. Mao's concern about bureaucratic differentiation and hierarchy breeding "bourgeois consciousness and class," for instance, led to the CMC's anti-bureaucratic measures such as requiring generals to spend two months as a soldier in a company every year, narrowing salary scales, eliminating military ranks, closing down military schools, and conducting incessant criticism sessions at all levels to intensify "internal contradictions" in order to expose "hidden class enemies."¹⁹⁴ Similarly, the dominance of mass mobilization methods during this period also extended into the PLA, where grassroots initiatives easily found their way to the high policy council of the CMC. The "Three Supports and Two Militaries," for instance, was based on a report from a local unit in Anhui Province, where local "rebels" requested the protection of the PLA in their mass rallies to criticize and attack the "capitalist roaders." The CMC also stamped its approval on a GLD's report on expanding PLA's participation in agriculture and sideline production in 1966, which apparently appealed to Mao's obsession with reducing the "bourgeois privileges" of the PLA through manual labor and self-sufficiency.¹⁹⁵

¹⁹² The principal leader of the commission from the CMC is General Chi. At the operational level, General Qian Shugen, a deputy PLA chief of staff, serves as secretary general. The commission has also been replicated at the provincial, prefecture, and county levels. For both mechanisms, see Zhang, *Contemporary World Military Affairs*, pp. 219, 263. For replication at lower levels, see Li Jun (head of the Military Affairs and Mobilization Department of the Beijing Garrison District), *et al*, "Tigao guofang dongyuan weiyuanhui de hongguan tiaokong nengli" [Enhancing the Adjustment and Control Ability of the National Defense Mobilization Commission at the Macro-level], in *National Defense Editorial Department, In Order to Fight and Win Tomorrow's War*.

¹⁹³ This is the view proposed by a mainland participant at the CAPS/RAND Conference on PLA as Organization, Airlie House Conference Center, Warrenton, Virginia, August 4-6, 2000.

¹⁹⁴ See Li, *One Hundred Major Events*, pp. 118-119, 147-149, 155-159, 164-166, 300, 359.

¹⁹⁵ For the origins of the two policy ideas, see *ibid.*, pp. 233, 404-405.

With gradual restoration of bureaucratic hierarchy since the middle 1970s, however, the "bottom-up" approach has gradually been replaced by a "top-down" approach, reflected in major CMC decisions such as terminating the "Three Supports and Two Militaries"; reducing the PLA's participation in agricultural and sideline production; restoring military ranks; restoring military research and learning institutions; downsizing and reorganizing the PLA in 1985, 1992, and 1997, involving the elimination of a large number of lower level headquarters, departments, and units; and ordering the divestiture of lower levels from commercial activities in 1998.¹⁹⁶ To the extent no evidence exists that these policies have failed, even though they clearly reduced the influence and vested interests of lower levels, it obviously weakens the argument that the CMC is mere the captive of lower level special interests.

There are several major reasons why the CMC is gaining more policy autonomy from both the CCP leadership and the lower levels. On the CCP leadership side, the generalized nature of the new CCP policy framework and the collective nature of the new CCP leadership allow substantial leeway for the CMC to exploit and to make policy choices. The CCP policy transition from "war and revolution" to "peace and development," for instance, has not specified the military policy implications of such transition. It is therefore up to the CMC to articulate these implications in terms of the scope and nature of the PLA's new missions, and the new requirements for PLA's operational doctrine, organization and personnel, arms and technology, and finance and logistics. Also, the relative lack of knowledge of military affairs by the new generation of CCP leadership the establishment of a nominal civil-military boundary as discussed earlier, and the technology-driven sophistication of the military profession may all contribute to the increased policy autonomy of the CMC.

With regard to lower level PLA organizations the restoration of bureaucratic hierarchy and the end of mass mobilization methods in the PLA have largely strengthened the authority of the CMC. It has also ensured that lower level organizations function primarily to implement the policy decisions of the CMC. Even though they may have input into the policy processes, they are not primary sources of policy ideas and provide feedback on implementation for higher-level organizations to make policy adjustments. The need to show competence or face-based legitimacy of the CMC also favors a "top-down" approach.¹⁹⁷ On the other hand, with the increasing technological sophistication

¹⁹⁶ During the 1985 downsizing and reorganization, for instance, the heads of the general departments functioned mainly to flesh out the responsibilities of their respective departments in the new policy, and proceeded to carry out these responsibilities accordingly. For most of the new policy initiatives, see *ibid.*, pp. 237, 300-302, 337-340, 359-364, 405. For the functions of the heads of the general departments, see *ibid.*, pp. 328-332, 341-343.

¹⁹⁷ The new emphasis on the "high-tech" nature of future wars and on *doctrine*-driven (rather than *practice*-driven or mass line-based) defense modernization, for instance, can be interpreted as a political strategy to reinforce the policy autonomy of the PLA leadership, because the increasing technological sophistication of the PLA would

of the PLA, research and learning institutions may play an increasingly important role in generating policy ideas, particularly if they can bridge the gap between knowledge and practice by developing closer relations with the CMC on the one hand, and with the PLA lower level operational departments and units on the other.

CONCLUDING REMARKS

Compared to the period of the Cultural Revolution, the CMC has fewer members, is more streamlined, more homogeneous (as it is dominated by uniformed members), and less contentious (as bureaucratic norms and mechanisms replace ideology-based personal attacks in policy negotiations). It is also better insulated from civilian institutions and lower level PLA departments and units. This new period should translate into a higher level of effectiveness in both policy-making and coordination. On the other hand, there are still major internal and external issues that need to be addressed if the CMC intends to become a more effective policy-making and coordination institution.

Internally, restoring bureaucratic hierarchy, norms and mechanisms have certainly enhanced the institutional stability of the CMC, which should translate into a higher level of policy effectiveness. The new official emphasis on stability and consensus may also provide the incentive for bandwagoning behavior on the part of the members and lower level organizations. An unintended effect of such an emphasis, however, may be discouraging and even stifling innovative and creative policy ideas, which can be seen as being too disruptive. This in the long run may cause institutional stagnation and contribute to mediocrity. The lack of critical voices may also contribute to power abuses. Both may negatively affect the credibility and legitimacy of the CMC, and therefore its policy effectiveness. Also, the sharp contrast between the hyper-stability of the CMC on the one hand, and the constant reshuffling of lower level leaders, departments and units due to years of streamlining and reorganization on the other, and the dominance of the "top-down" approach, may contribute to a sense of insecurity and alienation at lower levels. This sense of insecurity and alienation, if not mitigated well, could translate into passive and tacit obstruction against policy programs handed down from above, thus diminishing policy effectiveness, particularly in policy implementation and coordination.

The relationship between the CMC and lower level organizations is somewhat related to the issue of service representation in the CMC. The current configuration where a CMC presides over the four PLA general departments that serve as the CMC's working arms, is replicated in all levels of the PLA headquarters. Such a configuration is a product of Leninist centralism, since it is a pyramid structure where the top (CMC) exercises control of lower levels through managing strategic factors such as operations, personnel policy, arms and technology, and finance and logistics (the four functional areas matching the four general departments, which penetrate into all services and extend to the lowest level of the PLA). The conventional wisdom that China's CMC resembles the US Joint Chiefs of Staff may be flawed. This is because while the former is a centrally

enhance the leverage of the PLA leadership in bargaining with the CCP leadership for resources, and doctrine dominance would reinforce the hands of the CMC in dealing with lower levels.

managed Leninist institution rather than a representation of services, the latter is seemingly a services representation institution designed to mediate and coordinate the sometimes competing and even conflicting interests of various services, the outcome of a more pluralistic context where each service has enjoyed a high level of autonomy and developed strong service identity. Such a difference probably explains why PLA thinkers seem to encounter tremendous difficulties in figuring out how to transform the CMC into a services representation institution, particularly if such transformation implies a new configuration where the heads of the four general departments (who constitute the majority of the current CMC membership) would be replaced by the chiefs of the four major services (ground, naval, air, and strategic rocket forces) in the CMC, and this new configuration would be replicated by all levels of the PLA headquarters: a revolutionary and therefore almost impossible task. On the other hand, as the PLA's technology-intensive services become more developed and the concept of joint service operations is increasingly seen as necessary to enhance combat effectiveness, allowing for service representation at the PLA's central policy council also becomes more indispensable in order to achieve better policy and coordination. It is still not clear how the PLA would resolve the contradiction between an old Leninist style institution where service representation is nonexistent, and the need for more versatile forms to accommodate more diversified, technology-driven changes.

Finally, while the collective, committee decision making style of the CMC has certain merits such as lowering chances of arbitrary and hasty decisions, the drawbacks are also apparent. One is that the possible time-consuming process to build consensus (or unify thought) within the CMC may impede fast reaction to crises, leading to loss of "windows of opportunities" for maximizing benefits and reducing cost. Such a drawback becomes particularly glaring at a time when the PLA is supposed to react to local contingencies fast enough to achieve "quick resolution" in the PLA's favor, as required by the new doctrine of "local war under high-tech conditions." PLA thinkers may argue that during a crisis, commanding officers can make discretionary decisions; and that a separate crises or wartime command structure can be simulated and practiced to prepare for possible contingencies. But these ad hoc mechanisms still raise contentious issues such as what constitute crises that warrant discretion; and how to make the transition from peacetime collective decision making to a wartime type of command. The possible coexistence of three types of decision mechanisms (a Party committee headed by a first secretary and secretaries; an administrative chain of command headed by a commander and a commissar; and a separate wartime command) may also inflate bureaucracy and complicate policy processes further, making it more difficult to make timely decisions, thus reducing policy effectiveness. Moreover, a Party committee coexisting with an administrative chain of command may lead to debate over what constitutes "major" policy issues to be decided by the Party committee, and what are the "administrative" issues to be resolved by commanding officers. Also, the requirement of an individual commanding officer to fulfill decisions made by the Party committee raises thorny questions on who should be held accountable for these decisions (the committee or the individual), particularly if the policy fails. Until the PLA finds answers to these issues and questions, the policy effectiveness of the CMC will remain much less than optimal.

Regarding external relationships, the central issue is how to separate the CMC from the CCP Central and integrate it into the government institutions of the State

Council and the NPC, so that executive control of the military and legislative oversight over military affairs can be established. The close ties of the CMC with the CCP Central and the lack of such ties with the State Council and the NPC have several shortcomings. One is that since the CMC is accountable to the CCP Politburo and its Central Committee who do not meet regularly to deal with daily affairs, the lack of routine executive supervision of the PLA (due to lack of the jurisdiction of the State Council premier over the PLA institutions) may contribute to frequent policy disputes between the State Council ministries and the PLA general departments. It is still not clear how well the newly established State Council-CMC coordination conferences and the State National Defense Mobilization Commission mitigate such disputes. It seems however that these institutions are designed mainly for the PLA to commandeer civilian manpower, technology and equipment, infrastructure, and properties for military operations, rather than to negotiate the costs of using civilian resources or for the State Council to restrain the PLA from unrestricted access to these resources. It is therefore necessary to establish a genuine MND within the State Council, largely because this would achieve true executive control of the military and more effective civil-military policy coordination. A real MND would also absorb a large number of political-military and administrative functions currently fulfilled by the PLA general departments. The absorption by the MND of some general departments would contribute to true downsizing of the PLA bureaucracy from top to bottom. This would make it easier to develop a more streamlined PLA command structure, and make it more likely to transform the CMC into a service representation institution.

Secondly, with economic decentralization, privatization and development, a substantial middle class is emerging in China. They pay taxes and want to know how the government, for instance, is spending tax money on national defense. The current secrecy of the defense budget stems mainly from weak legislative oversight and the virtual monopoly of this process by the CMC and the CCP Central. It is therefore necessary to establish a genuine MND, which is accountable to the NPC and the State Council in defense budget, personnel policy and other defense-related issues, but not to the CCP Central. Regular and careful legislative oversight over defense spending details (but not just general principles and figures) would increase the transparency of the budgetary processes and reduce the chances of abuse and corruption, thus enhancing both the credibility and legitimacy of the government and the military, as well as policy effectiveness.

Finally, if China eventually moves toward true political reforms, such as introducing multiparty competition for political offices, the current close ties between the CMC and the CCP Central may make it more difficult to transform the PLA into a politically neutral, nonpartisan institution devoted mainly to functional and technical expertise of the military profession. In the initial stage of democratization, for instance, the hard-line faction of the PLA leadership may feel so insecure about the future that it may mobilize its loyalists at lower levels and outside of the PLA to launch a coup to defend one-party monopoly (as had happened in the Soviet Union during a similar transition) or to impose direct military rule, or it can fight the liberal military faction and their civilian allies, thus throwing China into civil war. By gradually separating the CMC from the CCP Central and integrating it into the NPC and the State Council framework, however, the odds of such conflicts would be greatly reduced once China begins to

democratize.¹⁹⁸ Such a separation also allows for the withdrawal of the CCP from the government and military policy arena, and enables it to become a normal political party that competes for political offices with one or more others through genuine elections.

Table 2.9 Major CMC Enlarged Conferences, 1954-75

Critical Years	Agendas	Resolutions Approved
December, 1954	a) Three systems (conscription, military ranks, salary for officers) b) Geographical division of military regions (MR) c) Military training and officers' education.	"Working Report on Implementing Three Systems" Plan on MR Division
January, 1957	a) Streamlining and reorganization (reports delivered by Peng Dehuai and Huang Kecheng) b) Relationship between civilian economic development and national defense construction.	"Resolution on Reducing Quantity and Improving Quality in the PLA"
May – July, 1958	a) Criticizing "dogmatism" (implying Soviet style methods) in military training. Mao Zedong, Zhu De, and Peng Dehuai delivered speeches.	"Resolution on PLA Reorganization.
August – September, 1959	a) Criticizing Peng Dehuai and Huang Kecheng's "anti-Party crimes" and "bourgeois military line" following criticism of the "Peng-Huang Right opportunism" at the 8th Plenum of CCP 8th Congress. **	
January – February, 1960	a) Military strategy b) National defense construction c) The "Three Eight Work Style" ("sanba zhuofeng") proposed by Lin Biao.***	1960 Outline on National Defense Construction
1960, September -	a) Strengthening political and ideological work	"Resolution on Strengthening Political and

¹⁹⁸ Such a separation should be accompanied by removing the CCP role from the legislature and the executive branch of the government as well, and terminating partisan activities in the military, thus leveling the ground for the new multiparty competition.

October	b) Criticizing mistakes of Tan Zheng.**	Ideological work of the PLA” “Resolution on Mistakes of Comrade Tan Zheng”
June - July, 1961	a) Organization and equipment of war duty units b) The PLA’s operational plan c) Problems in unit management and education, and in military training d) Streamlining through reducing the bureaucracy e) Reducing military expenditure and the scope of defense industry to focus on key projects and to assist civilian economic construction.	
June – July, 1975	a) Streamlining and reorganization, and placement of surplus officers b) Deng Xiaoping’s speech alleging that PLA leadership is “soft, lazy, and disorganized” and units ‘bloated, undisciplined, spoiled, extravagant and lazy,” and that it is necessary to focus on “organization, arms, and training” to rectify these problems c) Ye Jianying’s speech warning against “interference in military affairs through conspiracy by ambitious persons (implying “Gang of Four”)”	“Report on Reducing the Military Personnel Quota, Adjusting System of Organizations and Outplacing Surplus Cadres”

*Adapted from Liao, *A History*, pp. 317-318.

**Both criticisms led to the removal of Peng from CMC, and Huang Kecheng and Tan Zheng from CMC and their jobs as PLA chief of staff and GPD director; and removal of many alleged to be members of their “anti-Party cliques.”

*** “Three” refers to three adages such as “resolute and correct political direction, hard work and plain living working style, and flexible strategy and tactics.” “Eight” refers to eight characters, the translation of which mean “unity, intensity, solemnity, and liveliness.” One “crime” that led to Tan Zheng’s removal from his GDP director position in the following months is Tan’s alleged comment that PLA style is too rich to be defined by just several adages and characters, and his joke that “three eight” may be misunderstood as the International Women’s Day (March 8 can also be pronounced *sanba* in Chinese).

Table 2.10 Major CMC Plenary or Enlarged Conferences, 1977-1989

Critical Years	Agendas	Resolutions Approved
December, 1977	<ul style="list-style-type: none"> a) Rectifying policy of 1975 CMC conference and summarizing experience on criticizing "gang of four" b) Principles and missions for strengthening army construction and war preparation 	<p>"Resolution on Strengthening Military Education and Training PLA Regulations on Keeping State Secrets"</p> <p>"Resolution on Managing Military Schools Well,"</p> <p>"Plan on Adjusting Military System of Organizations"</p> <p>"Resolution on Accelerating Arms and Equipment Modernization"</p>
		<p>"Resolution on Question of Military Service"</p> <p>Resolution on Strengthening Management of Military Factories, Horse Farms and Sideline Production"</p>
March, 1980	<ul style="list-style-type: none"> a) Deng's speech on "reducing bloating," reorganization, approved training, and political work b) Xu Xiangqian's speech on personnel quotas and placement of discharged officers due to downsizing 	<p>"CMC Plan on Army Streamlining and Reorganization" (approved by a CMC Standing Committee meeting in July)</p>
1985, May - June	<ul style="list-style-type: none"> a) Strategic transition from preparing for "early, total, nuclear war" to peacetime army building, with emphasis on reducing quantity, enhancing quality, on developing better arms and improving quality of personnel, and on more rational organization that optimally combines arms and men to 	

	<p>enhance effectiveness</p> <ul style="list-style-type: none">b) Plan to demobilize a maillion menc) Appointing commanding officers for new general departments, services and military regions.	
<p>December (enlarged to group army level commanding officers, 1986</p>	<ul style="list-style-type: none">a) Political work in the new periodb) Arranging military, logistics, and national defense scientific research workc) Drafting documents on cadre work, military training, and management and education.	
<p>November (enlarged to responsible persons of general departments, services, MRs, and PAP), 1989</p>	<ul style="list-style-type: none">a) Continuation of Deng Xiaoping's theory, guidelines and principles after his resignation from CMC chair positionb) Arranging military work for 1990	

* Adapted from Liao, *A History*, pp. 319-321.

3. THE PINNACLE OF THE PYRAMID: THE CENTRAL MILITARY COMMISSION¹⁹⁹

By David Shambaugh²⁰⁰

The real “nerve center” of the Chinese military system is clearly the Central Military Commission (CMC or *Zhongyang Junwei*). It is the principal deliberative and decision-making body for all major military and strategic decisions that involve the PLA. Command authority and the complete decision making power to deploy China’s armed forces resides with the CMC—although one authoritative and *neibu* PLA source states that, “Practically speaking (*shiji shang*) major questions concerning war, armed force, and national defense building are decided by the Central Committee Politburo. Therefore, in reality, the highest-level decision-making authority is the Central Committee Politburo (*Zhongyang Zhengzhi Ju*).”²⁰¹ In addition making ultimate decisions concerning the deployment of troops, the CMC also has *direct* control over the Second Artillery (missile forces) and the two principle educational institutions of the PLA, the National Defense University (NDU) and Academy of Military Sciences (AMS). As specified in the 1997 National Defense Law, the CMC also has ostensible command authority over the paramilitary People’s Armed Police (PAP), presumably via the General Staff Department, although the CMC’s command authority is shared with the Ministry of Public Security of the State Council (the PAP also has some fiscal ties to the Ministry of State Security).²⁰² The most important command line of authority runs from the CMC to the Four General Headquarters and, in turn, to each of the service branches and military regions. The CMC itself has other subordinate organs, as depicted below:

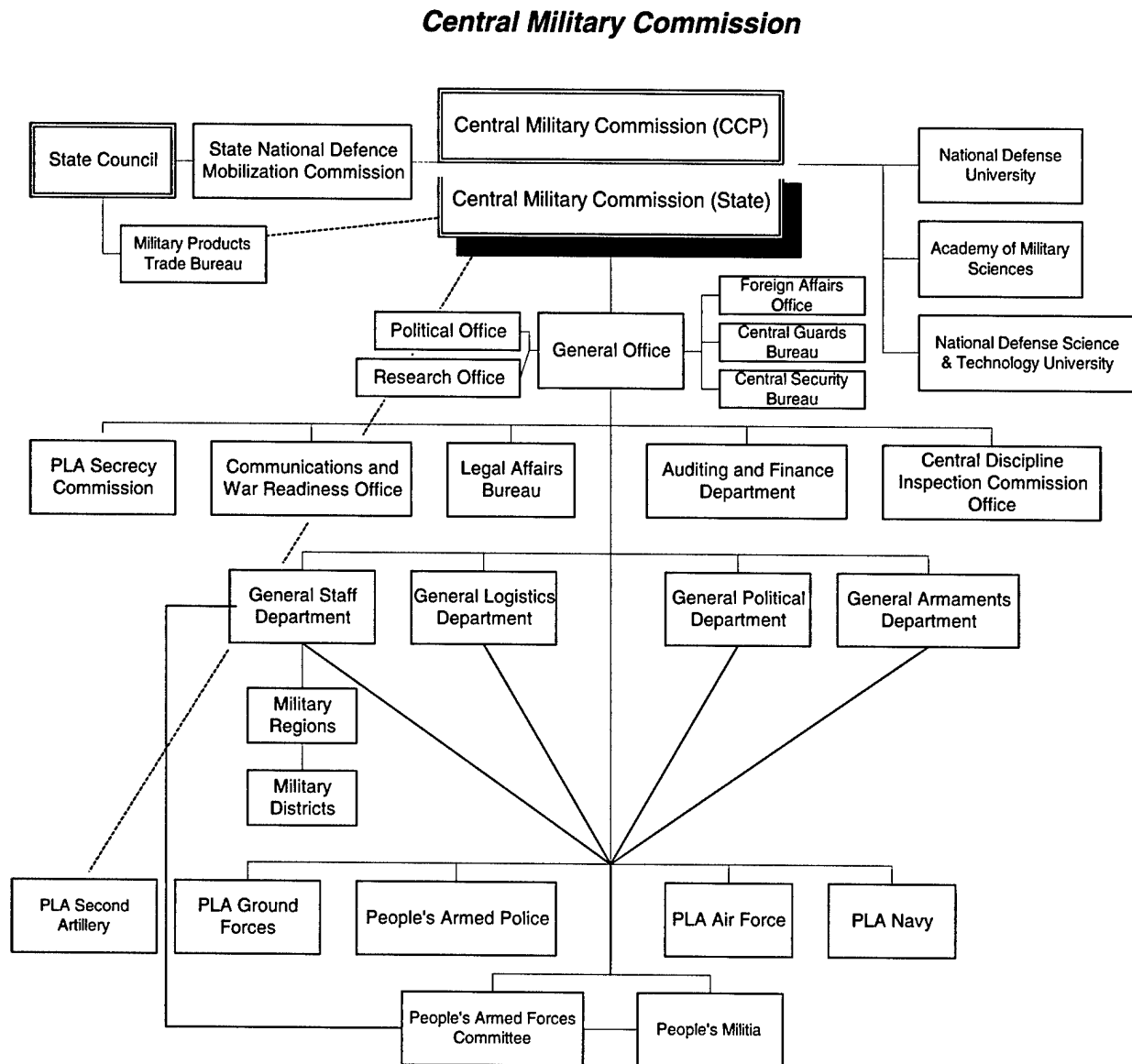
¹⁹⁹ This chapter is drawn from my book *Modernizing China’s Military: Progress, Problems, and Prospects*, University of California Press, forthcoming.

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²⁰¹ Yao Yanjin et al, eds., *Junshi zuzhi tizhi yanjiu*, Beijing: Guofang daxue chubanshe, *junnei faxing*, 1997, p. 371.

²⁰² For the text of the NDL and an exposition of its contents see Xu Jiangrui and Fang Ning, eds., *Guofangfa gailun*, Beijing: Junshi kexue chubanshe, 1998.

Figure 3.1 Central Military Commission



Sources: *Directory of PRC Military Personalities*, various years; Academy of Military Sciences (ed.), *Shijie Junshi Nianjian*, various years; Yao Yunzhi et al (eds.), *Junshi Zuzhi Tizhi Yanjiu*; interviews.

HISTORICAL EVOLUTION OF THE CMC

The CMC of the Chinese Communist Party (CCP) has a lengthy history dating to October 1925. It was reorganized numerous times during the Civil War and Anti-Japanese War, but held the name *Zhongyang Junshi Weiyuanhui* (CMC) and the administrative level of a Central Committee commission (which rank higher than Central Committee departments such as the Organization, Propaganda, United Front Work, and Investigation Departments) since March 1930.²⁰³ In September 1949, the armed forces were reorganized and centralized into the People's Liberation Army and the People's Public Security Forces (*Renmin Gong'an Budui*) and a Central People's Government Revolutionary Military Affairs Commission (*Zhongyang Zhengfu Geming Junshi Weiyuanhui*) was established.²⁰⁴ After the PRC was proclaimed on October 1st, a CMC was created inside the Party (*dang nei*).²⁰⁵ In September 1954, at the First Session of the First National People's Congress, a new Constitution was promulgated and a new National Defense Commission (*Guofang Weiyuanhui*) was created under the Central Government, but it is described as having been intended "as a consultative (*zixunxing*) body, not as a leadership organ over the armed forces."²⁰⁶ At the same time, the Central Committee decided to create a new Central Military Commission under the CCP, which would have complete leadership (*quan lingdao*) over the PLA and other armed forces, and a new Ministry of National Defense under the State Council. This dual arrangement of having state and Party military commissions existed on paper until January 1975 when the Fourth Session of the NPC decided to formally abolish the post of President of the PRC and the National Defense Commission—although, in fact, both had ceased to function after the Cultural Revolution broke out in 1966. President Liu Shaoqi, Chairman of the National Defense Commission, was purged and died in a solitary cell in a Kaifeng prison in 1969.

Like almost all central-level organs during the Cultural Revolution, the CMC's membership and responsibilities were disrupted. However, it did not cease to function. It continued to meet on several occasions, and when it met the CMC generally sought to insulate the military from the Red Guards and the political radicalism rampant at the time. For example, the CMC convened a prolonged

²⁰³ See Lei Yuanshen, "Zhongyang junwei biandong" [The Evolution of the Central Military Commission], *Zhonggong dangshi ziliao*, Vol. 34 (1990), p. 219; Pu Xingzu, *Zhonghua renmin gongheguo zhengzhi zhidu*, Shanghai: Renmin chubanshe, 1999, pp. 557-58.

²⁰⁴ Ibid.

²⁰⁵ Ibid.

²⁰⁶ Ibid, p. 559.

expanded session at the Jingxi Hotel in February 1967.²⁰⁷ This meeting produced an "Eight Point Circular" (known as the *Ba Tiao*) aimed at strengthening command and control over geographic military units, protecting weapons stocks from raiding by Red Guards, protecting secret documents and archives, and regularizing the PLA's training regimen.²⁰⁸

Throughout this period, major military decisions were made in *ad hoc* meetings of Chairman Mao, Defense Minister Lin Biao (prior to his death in September 1971), and several senior PLA Marshals who had the lucky fortune of not having been purged (notably Ye Jianying, Xu Xiangqian, and Chen Yi).²⁰⁹ Mao relied heavily on these elder marshals during this time, particularly as tensions with the Soviet Union mounted. In fact, it was the triumvirate of Chen Yi, Ye Jianying, and Xu Xiangqian that the Chairman tasked to undertake an assessment of China's national security environment in the aftermath of the 1968 Soviet invasion of Czechoslovakia. The marshals allegedly convinced Mao that the situation was extremely threatening, that war with Moscow was imminent (and would likely include nuclear conflict), and that China needed a dramatic opening to the United States to offset the Soviet threat.²¹⁰ This was in the summer of 1968. It took *three years* of discrete signaling by Mao and the Chinese side before Henry Kissinger and Richard Nixon took their own initiative in September 1971 to reach out to the Chinese leadership.

While the CMC was moribund during these years, the six subordinate units of the CMC all continued to function to varying degrees, and in effect substituted for the CMC by running the PLA. This was certainly the case with the General Staff Department, which continued to operate thirteen departments and direct forces in the field.²¹¹ Its General Office was merged with the General Office of the CMC.²¹² However, the General Political Department was in a state of political chaos and underwent a sweeping purge (see below)—while the General Logistics Department, National Defense Science and Technology Commission, and National Defense Industries Office maintained a modicum of production and research (see chapter

²⁰⁷ Academy of Military Sciences History Department, ed., *Zhongguo Renmin jiefangjun de qishinian*, op cit, p. 556.

²⁰⁸ Ibid, p. 557.

²⁰⁹ See Li Ke and Hao Shengzhang, 'Wenhua Da Geming' *Zhong de Renmin Jiefangjun*, Beijing: Zhonggong dangshi ziliao chubanshe.

²¹⁰ Interview with Chen Yi's son, Chen Xiaolu, March 1990. This account has been subsequently confirmed by Chinese historians.

²¹¹ Li Ke and Hao Shengzhang, 'Wenhua da Geming' *zhong de renmin jiefangjun*, op cit, pp. 351-52.

²¹² Ibid, p. 353.

6).²¹³ The Academy of Military Sciences, however, was severely disrupted and essentially ceased to function (*tingzhi*).²¹⁴

After the worst of the Cultural Revolution chaos, and the opening to the United States (which partially offset the immediacy of the Soviet threat), Deng Xiaoping and the marshals set about rebuilding the PLA in 1974-75. One of the first steps was to reconstitute the CMC. This was particularly needed after the death of Lin Biao, following an alleged *coup d'etat* attempt, and the purge of his followers in the upper echelons of the PLA. The CMC was gutted and radically reduced in size (see below). It took several years to weed out the "Lin Biao Counter-Revolutionary Clique" in the CMC, General Headquarters, and services (especially the Air Force and Navy),²¹⁵ but once it was done the new CMC met in February 1975.²¹⁶ Ye Jianying and Deng Xiaoping were put in charge of overseeing the daily work of the CMC. The revamped CMC convened a major expanded work conference from June 24-July 15, 1975 that took a series of decisions on the restructuring of the PLA and concerning China's international security environment. Even when Deng was purged again in 1976, the revamped CMC continued to function on the leadership of Marshal Ye Jianying.²¹⁷

When Deng returned to the stage in 1977, he gradually worked to regain control over the military. By 1982 he had usurped Hua Guofeng's role as Chairman of the CMC and re-installed himself as Chief of Staff. A *state* CMC was reestablished at the Fifth Session of the Fifth NPC in December 1982, and it was enshrined in a new national Constitution (a revised parallel CCP Constitution reaffirmed the Party CMC). The restoration of a separate CMC under the Government was seen as an important manifestation of the new policy of "separating party from government" (*dang-zheng fenkai*), as advocated by reformist Premier Zhao Ziyang and CCP General Secretary Hu Yaobang.²¹⁸ Certainly Deng Xiaoping supported the initiative. After Zhao was purged in 1989 he was criticized for having tried to usurp Party authority over the military by (re)creating a state CMC, but in fact the move proved purely cosmetic—as the state CMC existed only on paper. The membership was identical, the state CMC never met separately, and it had no separate powers other than ostensibly being responsible to the President of the republic and the Chairman of the Standing Committee of the National People's Congress. The two

²¹³ Ibid, pp. 351-352.

²¹⁴ Academy of Military Sciences History Department, eds., *Zhongguo renmin jiefangjun de qishinian*, op cit, p. 560.

²¹⁵ For a description of this process, see ibid, pp. 564-568.

²¹⁶ Ibid, p. 569.

²¹⁷ For an excellent study of this period see Cheng Zhongyuan, et al, *1976-1981 nian de Zhongguo*, Beijing: Zhongyang wenzhai chubanshe, 1998.

²¹⁸ Academy of Military Sciences History Research Department, *Zhongguo renmin jiefangjun de qishinian*, op cit, p. 622.

bodies were the same—described by Chinese as “one overlapping body and one organization” (*yitao banzi, yige jigou*) or “two signs, one organization” (*liangge paizi, tong yige jigou*)—and the Party CMC is the one with real power and authority. Other Chinese sources claim that the existence of two CMCs is no contradiction (*liang zhe bing bu maodun*), and is meant to illustrate that the “Party and state have united leadership and organizational assurance towards national military power,” and that “the Party and Government are not separated, but that the Party leads the Government,”²¹⁹ but it is clear that the state CMC is a hollow body with no autonomous power. In terms of command authority the PLA remains a party-army, although in other realms there is evidence of movement towards more autonomous and corporate roles for the PLA. The PLA remains far from becoming a “national military” or “state military” (*guojia jundui*), but there nonetheless has been distinct movement in the direction of limited military autonomy from the Communist Party.²²⁰

While membership in the two CMCs today is identical, the process of selecting members has changed in recent years as part of the process of regularizing and standardizing PLA procedures. In earlier years, the CMC was a large organ that included a wide variety of senior military commanders and leaders. As such it has fluctuated greatly in size and composition. From 1949-54 it had no fewer than 28 members, shrinking slightly to 22 members between 1954 and 1966, before ballooning to 52 members during the 1969-1977 period, and 64 during the 1977-1982 period!²²¹ To be sure, during much of this time an “inner cabinet” of the CMC existed which included Mao and perhaps a half dozen senior military leaders and who met and made key decisions—although it was by no means unknown for Mao to convene a full or expanded (*kuoda*) CMC meeting when warranted.²²² After 1982 and Deng Xiaoping’s regaining of authority over the PLA, the CMC shrunk considerably in size and instituted an *ex officio* system of membership. Under the new system, the heads of the (then) three General Departments and the Minister of

²¹⁹ Li Shouchu, ed., *Zhongguo zhengfu zhidu*, Beijing: Zhongyang Minzu Daxue chubanshe, 1997, p. 297.

²²⁰ This phenomenon is discussed at much greater length in my *Modernizing China’s Military*, op cit, chapter 2.

²²¹ As compiled by Yan Kong in “Evolution of the Central Military Commission,” unpublished paper (1993). Yan draws mainly on Academy of Military Sciences, ed., *Zhongguo renmin jiefangjun zuzhi yange he geji lingdao chengyuan minglu*, Beijing: Junshi Kexueyuan chubanshe, 1987 and Liao Gailong, ed., *Dangdai Zhongguo zhengzhi dashidian, 1949-1990*, Changchun: Jilin wenhua lishi chubanshe, 1991. Nan Li calculates similar numbers from other Chinese sources in “Organizational Changes in the PLA, 1985-1997,” in *The China Quarterly*, June 1996, p. 320.

²²² For a detailed listing of these expanded CMC meetings see Hou Shudong, et al, eds., *Guofang jiaoyu da cidian*, Beijing: Junshi kexue chubanshe, 1992, pp. 96-97.

Defense would automatically serve on the CMC. In addition, there would be a Chairman (Deng), several vice-Chairmen (usually three but unspecified), and a Secretary-General. After 1992 and the purge of Yang Baibing, the position of Secretary-General was eliminated. Since 1989 the President of the PRC, Jiang Zemin, has served simultaneously as Chairman of the CMC, although this is not stipulated by the Constitution or other regulation. Jiang's simultaneously dual positions as Party leader and state president blurs the distinction as well as providing some validity to concept of having two separate military commissions. In 1999, after several attempts by Jiang to install him, the Vice-President of the PRC (Hu Jintao) was added as First Vice-Chairman (a position resurrected from the 1980s when Zhao Ziyang held it), becoming only the second civilian member of the CMC. Hu has no background in military matters whatsoever (neither does Jiang²²³), and reportedly commands little respect from the military brass. The Premier of the State Council, Zhu Rongji, is not a member. In terms of actual power and decision authority the two senior vice-chairmen and serving officers—Zhang Wannian and Chi Haotian today—enjoy overall authority within the CMC. No doubt Jiang Zemin and certainly Hu Jintao, defer to the judgment of these men on most matters. It is not clear if Generals Zhang and Chi share a division of labor in terms of overseeing different elements of defense policy and the military establishment,²²⁴ as was the case with their predecessors Generals Liu Huaqing and Zhang Zhen (Liu oversaw weapons production, defense industries, and military diplomacy, while Zhang was in charge of doctrine, training, deployments, and military education).²²⁵ The other members of the CMC constitute, in effect, an informal "executive committee" with functional responsibilities for their respective functional bailiwicks (not unlike the "leading small group" system in civilian policymaking).²²⁶ It remains permissible to include members of the CMC who command Military Regions or have other portfolios (such as Wang Ruilin, Guo Boxiong, and Xu Caihou today), but the day of enlarged and "packed" CMCs ended with the Maoist era.

²²³ See my "China's Commander-in-Chief: Jiang Zemin and the PLA," in C. Dennison Lane, et al, *Chinese Military Modernization*, London and Washington, D.C.: Kegan Paul International and AEI Press, 1996, pp. 209-245.

²²⁴ One Hong Kong source asserts that Chi is merely responsible for military diplomacy in his capacity as Minister of Defense, while Zhang has authority over all military matters. "Beijing Holds Enlarged Meeting of Central Military Commission: Zhang Wannian Pursues New Ideas for Developing Weapons," *Guang Jiao Jing* [Wide Angle], 16 December 1997, translated in BBC, *Summary of World Broadcasts/Far East*, 30 December 1997.

²²⁵ Interview with aide to General Liu Huaqing, June 1993.

²²⁶ See Michael Swaine, *The Role of the Chinese Military in National Security Policymaking* (revised edition), Santa Monica: RAND, 1998, pp. 43-44.

The CMC usually convenes in full session about half a dozen times per year, always following a Party plenum or Congress, always in December to approve the proposed military budget for forwarding to the State Council, and whenever else it is warranted. These CMC meetings usually stretch out over several days, sometimes taking place in the Jingxi Guest House (a military hotel owned by the General Political Department in central Beijing), sometimes in the Zhongnanhai, or sometimes in the Great Hall of the People. Now that the Ministry of National Defense has built a palatial new office compound on West Chang'an Boulevard, in which the CMC occupies the top floor, it is likely that CMC meetings will henceforth take place in this new building. It is unclear how the meetings are actually run, whether the members actually "vote" on agenda items or deliberate policy on the basis of consensus. Participants include CMC members, but others can be invited on a case-by-case basis (sometimes CMC meetings receive special briefings on specific situations, such as Taiwan). Usually, one or two "Decision" documents are promulgated after a full CMC meeting, but the content of these are likely prepared and agreed in advance. The agenda itself is likely shaped by subordinates in the CMC General Office. Contrary to numerous reports in the Hong Kong media, it is highly unlikely that CMC meetings consider "petitions" put forward by dissatisfied generals or become forums for table-pounding military bluster against Taiwan, the United States, Japan, or other would-be foes. PLA analyst Tai Ming Cheung also distinguishes several other types of CMC meetings (although these are not conformed by other sources):²²⁷

- A weekly work conference (*gongzuo hui*) that meets every Thursday to discuss routine administrative and staffing matters. Presumably, this is attended by members of the General Office staff.
- Irregular "knocking-heads" meetings (*peng-tou hui*), for informal discussion of pressing issues, usually attended by CMC military members and other senior PLA officers.
- Discussion meetings (*zuotan hui*) last for several days, often after a Party plenum, for detailed discussion of major defense and national security issues.
- Plenary meetings (*quanti hui*), usually at the end of every calendar year to assess the past year's work, finalize the next year's budget and Annual Plan.
- Enlarged meetings (*kuoda hui*) convened on special occasions and included several hundred military leaders.

²²⁷ Tai Ming Cheung, "The Influence of the Gun: China's Central Military Commission and Its Relationship with the Military, Party, and State Decision-Making Systems," in David M. Lampton, ed., *The Making of Chinese Foreign and Security Policy in the Era of Reform* Stanford: Stanford University Press, pp. 61-90.

What are the duties and functions of the CMC? According to published Chinese sources,²²⁸ the CMC:

- Establishes unified command over the nation's armed forces;
- Decides military strategy and the warfighting principles for the armed forces;
- Leads and manages PLA building, formulates regulations, plans and organizes deployments;
- Implements resolutions of the National People's Congress and its Standing Committee;
- Formulates military regulations according to the Constitution and law, and disseminates decisions and orders;
- Determines PLA structure and personnel, oversees the General Departments and Military Regions, and other organs under the Military Regions;
- Appoints and removes, cultivates, investigates, rewards and punishes armed forces personnel according to military law and regulations;
- Oversees and approves the armed forces' weapons equipment system and weapons equipment development orders and development plan, and coordinates with the State Council leads and manages national defense science and technology research and production; and
- Jointly organize and manage with the State Council the military budget and national defense investment.

The CMC exercises administrative control and oversight over the Four General Headquarters (General Staff, Logistics, Political, and Equipment Departments). This is ostensibly done via the membership on the CMC of each department director, but apparently there are representatives of each serving in the General Office of the CMC who serve as liaison. The CMC also exercises direct command authority over the seven Military Regions and services, although in practice this is done via the General Staff Department (particularly to the ground forces). The CMC also has administrative responsibility for the armed forces' two principal institutions of professional military education (PME), the National Defense University and Academy of Military Sciences (the organization of these is described below and in Figures 4:15 and 4:16). Importantly, according to an internal Chinese military source, the Second Artillery (strategic and tactical rocket forces) is "under the CMC's direct leadership, exercising vertical command" (*Di Er Pao Bing zai Zhongyang Jun Wei zhijie lingdao xia, shixing chuizhi zhihui*).²²⁹

The CMC also has command authority over the unit that offers personal security protection to all Central Committee members and leading military officials—the Central Security Bureau (*Zhongyang Bao'an Ju*), which is more commonly known as

²²⁸ Pu Xingzu, *Zhonghua renmin gongheguo zhengzhi zhidu*, op cit, p. 560.

²²⁹ Yao Yanjin, et al eds., *Junshi zuzhi tizhi yanjiu*, op cit, p. 372.

the Central Guards Bureau (*Zhongyang Jingwei Ju*).²³⁰ For many years this elite guard regiment was known simply by a four-digit designator: 8341. The number had no meaningful military nomenclature, but rather came from the serial number on a rifle that Mao Zedong had purchased during the 1927 Autumn Harvest Uprising. Mao kept the rifle throughout the Long March and in the Yan'an base area. He was very proud of it, enjoyed cleaning it, and accordingly decided to name his personal guard detachment in Yan'an by the number—and henceforth the 8341 Regiment assumed a lore of its own.²³¹ While the CMC has direct command over this unit and the CMC General Office oversees it on a daily basis,²³² the Beijing Military District garrison of the Beijing Military Region and the Security Bureau of the PLA General Staff Department apparently share some command authority and provide funds, equipment, training, and barracks for the elite guards.²³³ It is apparent, though, that the General Staff maintains a separate guard unit solely for top military leaders, while the Central Guards Bureau protects civilian leaders. The Ministry of Public Security, Ministry of State Security, and People's Armed Police also maintain their own elite guard units, but it is unclear how their jurisdiction is distinguished from the Central Guards (probably for local and visiting overseas officials). Each senior leader receives two types of security protection—a set of one to six bodyguards who are responsible for personal security as well as various daily logistical matters (arranging meals, medical care, clothing, transport, and other personal needs²³⁴) and a larger military/security detachment, ranging in size from a squad (*ban*) to a company (*tuan*) to secure an area during a leader's visit.²³⁵

The internal organization of the CMC is not entirely clear—and is, in fact, a state secret. It is known however, that the CMC contains at least five key organs. If the CMC is the “nerve center” of the PLA, then the CMC's General Office is the

²³⁰ See Wei Li, “The Security Service for Chinese Central Leaders,” *The China Quarterly*, September 1995, pp. 814-827.

²³¹ No author, “*Shuo bu wan dao bu pu de shenmi fuhao: ‘8341’ cong qiyong dao xiaoshi zhimi*” [The Endless Story of the Mysterious Symbol: ‘8341’ and the Mystery From its Inception to its Disappearance], *Huaxia*, No. 70 (June 1997), pp. 31-35; and “*Zhongnanhai de di yizhi jingwei budui*,” *ibid*, pp. 12-17.

²³² Interview with former Chinese military intelligence official, 5 August 2000.

²³³ *Ibid* and Wei Li, *The Security Service for Chinese Central Leaders*, *op cit*. The aforementioned interview source described the General Staff's command as *yewu zhidao* (professional guidance) instead of *lingdao guanxi* (leadership relations).

²³⁴ This includes massages and sexual favors. Chairman Mao, Ye Jianying, and other senior leaders were known to have used the guard units to procure modern-day concubines, “nurses,” etc. See, in particular, Li Zhisui (with the assistance of Anne Thurston), *The Private Life of Chairman Mao*, New York: Random House, 1994.

²³⁵ Wei Li, *The Security Service for Chinese Central Leaders*, *op cit*, p. 817.

nerve center of the nerve center. The General Office (*Zhong Ban*) processes all CMC communications and documents, coordinates meetings, and conveys orders and directives to other subordinate organs. It was formerly housed in the Sanzuomen complex just north of Beihai Park in central Beijing, and within a short distance of the Zhongnanhai leadership compound (and is reportedly connected via underground tunnel), although it moved along with the CMC to the top floor of the new palatial Ministry of Defense compound in western Beijing when it opened in 2000. The General Office is known to have a Director (Lieutenant General Tan Yuexin since January 2000²³⁶) and a number of Deputy Directors, most of who serve as the personal secretaries (*mishu*) to CMC members (Jiang Zemin has a separate military *mishu*, for many years this was Major General Jia Ting'an²³⁷). According to one source, the General Office has a total staff of between 200 and 300 members.²³⁸ The General Office also has a subordinate Political Office (*Zheng Ban*), Research Office (*Ke Yan Ban*), and Foreign Affairs Office (*Wai Ban*)—which is, in fact, identical to that of the Ministry of Defense.²³⁹ In past years, particularly in the late-1980s when General Li Jijun was Director, the General Office was a source of innovative ideas and reform initiatives—although it seemed to revert to a more bureaucratic role in the 1990s.

The CMC also has at least five separate first-level departments (*yi ji bu*), although they do not all bear the administrative title of “department.” These are all depicted in Figure 3.1 above. The Communications War and Readiness Office is the central command and control organ for disseminating orders and commanding forces in both peacetime and wartime. This Office thus liaises directly with the General Staff Department, Military Region commands, and but not the Second Artillery (which is under direct CMC control). It is probably into this Office where early warning, air defense, and other critical signals intelligence is channeled from the

²³⁶ Institute of Asian Affairs (Hamburg, Germany), *China Monthly Data*, April 2001, p. 12.

²³⁷ Jia Ting'an has served as Jiang's *mishu* for more than twenty years since Jiang was Minister of Electronics. He became his chief military secretary in the early 1990s and subsequently became director of the Jiang Zemin Office (*Jiang Ban*). He is thought to often represent Jiang at CMC meetings. In the summer 2000, however, Jia was reported to have been removed from his position and come under investigation for an alleged connection to the nation's largest smuggling and official corruption case, in which a Xiamen-based company (Yuanhua) with close ties to senior central-level leaders smuggled autos and a variety of other products worth nearly \$10 billion in Fujian. See BBC Monitoring, “Hong Kong Source Reports Removal of Jiang Zemin Aide Suspected of Corruption,” 14 August 2000.

²³⁸ Tai Ming Cheung, “The Influence of the Gun,” *op cit*.

²³⁹ Personnel in the *Wai Ban* have name cards that list both organs.

PLA's growing number of transmitters and sensors.²⁴⁰ It is also known that the PLA is embarked on a comprehensive upgrading of its communications systems for command and control. According to the U.S. Department of Defense, the PLA now possesses a completely automated command and control system, and is developing a new type of Integrated Battlefield Area Communications System (IBACS) that includes speech signal processing and broadband integrated services digital networks (B-ISDN).²⁴¹

The CMC also has a Legal Affairs Bureau (responsible for drafting military laws and regulations, and possessing sharing oversight of the military judicial system with the General Political Department), an Auditing and Finance Department (responsible for formulating the defense budget and liaising with the Ministry of Finance and State Council, as well as the General Logistics Department financial system), a Military Products Trade Bureau (set up in 1989 to oversee both the import and export of weapons and other military equipment), and a Central Discipline Inspection Commission (CDIC) office. The CDIC is a subsystem of the Communist Party within the military, which has the principal function of monitoring the performance of Party members and policing them for malfeasance, corruption, and other breaches of Party discipline and regulations. Since the CDIC was established within Party Committees (*dangwei*) in the PLA in September 1978 on the order of the CMC,²⁴² it has been jointly administered by the CDIC of the Central Committee and the CMC. During the time that General Yang Baibing served as Secretary-General of the CMC (1987-92), the CDIC committees reported directly to him, but subsequently a separate CDIC office was established in the CMC.

The CMC also has responsibility for the People's Armed Committees (*Zhongyang Junwei Renmin Wuzhuang Weiyuanhui*), and jointly administers (with the State Council) the State National Defense Mobilization Commission (*Gujia Guofang Dongyuan Weiyuanhui*). The People's Armed Committees (PAC) exists *within Party Committees* at the levels of province, autonomous regions, centrally-administered cities, prefecture, county, and township levels is described as the "a specialized organ

²⁴⁰ For a list of these command and control facilities see:
www.fas.org/nuke/guide/china/facility/c3i.html.

²⁴¹ *Selected Military Capabilities of the People's Republic of China*, Report from the Secretary of Defense to Congress Pursuant to Section 1305 of the FY97 National Defense Authorization Act, p. 5.

²⁴² The order was *Guanyu tuan yishang geji dangwei chengli jilu jiancha weiyuanhui zhidao* [Order Concerning the Establishment of the Discipline Inspection Commission in party Committees at the Regimental Level and Above], in Academy of Military Sciences Military History Research Department, ed., *Zhongguo dabaike quanshu: Zhongguo renmin jiefangjun zhengzhi gongzuo fence*, Beijing: Junshi kexue chubanshe, 1987, p. 37.

for the masses' armed construction."²⁴³ Its duty is to disseminate national defense information and CMC directives to the civilian population, and to "resolve any problems concerning the militia" (see section on People's Armed Police for discussion of militia).²⁴⁴ They apparently also have some responsibility for PLA recruiting. The PACs are supposed to liaise closely with Military Region and District commands, and were formally "aligned with" (*xulie*) the PLA by CMC order on April 1, 1996.²⁴⁵ Thereafter PAC officers began wearing PLA uniforms, whereas previously their uniforms were similar but distinct.²⁴⁶ The PACs have existed since at least the Great Leap Forward and became important for providing local security during the Cultural Revolution.²⁴⁷ The State National Defense Mobilization Commission (SNDMC) has other responsibilities for civil defense. It is under the "joint leadership" (*shuangzhong lingdao*) of the CMC and State Council, although it is not clear precisely at what levels of government it exists (presumably it parallels the PACs). The SNDMC itself is described as having at least four constituent offices: State People's Armed Mobilization Office (*Guojia Renmin Wuzhuang Dongyuan Bangongshi*), State Economic Mobilization Office (*Guojia Jingji Dongyuan Bangongshi*), State People's Anti-Air [Defense] Office (*Guojia Renmin Fankong Bangongshi*), State Transportation War Preparedness Office (*Guojia Jiaotong Zhanbei Bangongshi*).²⁴⁸ Both of these organs are no doubt remnants of the period in the 1960s-70s when China anticipated war with the former Soviet Union, and would only become active in time of war and invasion.

Clearly, however, the most important set of command relationships for the CMC are those to the Four General Headquarters (Departments) of the PLA. These organs are not only the principal conduits through which the CMC commands the services and military regions, but they are large and powerful organizations in their own right. They are dealt with in other contributions to this volume, and hence I will not detail them here.²⁴⁹

²⁴³ Academy of Military Sciences World Military Affairs Editing Bureau, ed., *Shijie junshi nianjian 1999*, Beijing: Junshi kexue chubanshe, 1999, p. 102.

²⁴⁴ Ibid.

²⁴⁵ Pu Xingzu, *Zhonghua renmin gongheguo zhengzhi zhidu*, op cit, p. 566.

²⁴⁶ I am indebted to Dennis Blasko for this observation.

²⁴⁷ See Harlan Jencks, *From Muskets to Missiles*, op cit, especially pp. 167-68.

²⁴⁸ Liu Zhaoxiang, ed., *Zhongguo junshi zhidushi: junshi zuzhi tizhi bianzhi juan* Zhengzhou: Dajia chubanshe, 1997, p. 545.

²⁴⁹ Also see vmy *Modernizing China's Military*, op cit, chapter 4.

THE CENTRAL MILITARY COMMISSION MEMBERSHIP²⁵⁰

As of 2001, the Central Military Commission today is chaired by CCP General Secretary and President Jiang Zemin and is composed of three Vice Chairmen (Hu Jintao, Zhang Wannian and Chi Haotian), and seven regular members (Fu Quanyou, Yu Yongbo, Wang Ke, Wang Ruilin, Cao Gangchuan, Guo Boxiong, Xu Caihou).

Table 3.1 Central Military Commission Members (2001)

<u>Member</u>	<u>Position</u>	<u>Date of Membership</u>
Jiang Zemin	Chairman	November 1989
Hu Jintao	Vice-Chairman	September 1999
Chi Haotian	Vice-Chairman	September 1995
Zhang Wannian	Vice-Chairman	September 1995
Cao Gangchuan	Member	November 1998
Fu Quanyou	Member	October 1992
Guo Boxiong	Member	September 1999
Wang Ke	Member	September 1995
Wang Ruilin	Member	September 1995
Xu Caihou	Member	September 1999
Yu Yongbo	Member	October 1992

Jiang Zemin is by far the most important civilian playing an active role in the civil-military arena.²⁵¹ Indeed, notwithstanding vice-president and Politburo Standing Committee member Hu Jintao, one is hard-pressed to identify *any* other party or government elites who have any influence or contact with the PLA High Command. Nor should Hu Jintao's influence be exaggerated. He has no personal military experience, but did serve as the first party secretary of the Tibet and Guizhou military districts during his service there (1985-88). Hu's elevation to the CMC at the Fourth Plenum of the Fifteenth Central Committee in September 1999 was a

²⁵⁰ This section also draws upon my "China's Post-Deng Military Leadership," in James Lilley and David Shambaugh, eds., *China's Military Faces the Future*, Armonk, NY: M.E. Sharpe, 1999, pp. 11-38.

²⁵¹ For further explication of Jiang's relationship with the PLA see Tai Ming Cheung, "Jiang Zemin at the Helm: His Quest for Power and Paramount Status," in *China Strategic Review*, Spring 1998, pp. 167-91; and David Shambaugh, "China's Commander-in-Chief: Jiang Zemin and the PLA," in C. Dennison Lane, et al, eds., *Chinese Military Modernization*, London and Washington, DC: Kegan Paul International and AEI Press, 1996, pp. 209-45. This section draw, in part, on this earlier work.

transparent move by Jiang Zemin's to continue the grooming of his chosen successor by giving him some military responsibility and exposure.

Jiang was not unlike Hu Jintao when he was suddenly appointed to become chairman of the CMC in November 1989. Upon his appointment Jiang reportedly confessed:

At the Fourth Plenum I said I am not worthy of being elevated to [the position] of General Secretary, I do not have the ideological preparation. This decision to promote me to Central Military Commission Chairman, has also left me without proper ideological preparation. I have not undertaken work in military affairs, I have no experience in this regard, I deeply feel the responsibility, but my ability is insufficient (*li de congxin*). The Party has placed a big responsibility on me. I will certainly assiduously study military affairs, will quickly strive to become familiar with the situation in the military, and will diligently and quickly carry out the duties [of the position].²⁵²

Despite his understandable uncertainty, over the course of the last decade Jiang Zemin has done a remarkably good job of cultivating a base of support in the PLA. He has certainly done a better job of winning military support than either of his predecessors Hu Yaobang and Zhao Ziyang (both of whom drew lukewarm support or opposition from the PLA High Command). Of course, one will not know the ultimate success of Jiang's efforts until he is tested in a crisis—although he weathered the 1995-96 Taiwan crisis, oversaw the removal of the Yangs and a wholesale turnover of the High Command, and felt confident enough to order the armed forces to divest themselves of their commercial holdings in 1998. As such, it appears that Jiang's position as commander-in-chief of China's armed forces is quite secure.

In cultivating a base of support in the PLA, Jiang has been careful, persistent, and methodical in his strategy and tactics. He has certainly been attentive since the beginning of his tenure in office—frequently visiting bases and units, cultivating relationships with various high-ranking officers, and staking out palatable positions on issues of key concern to the PLA. His has been a building-block strategy—establishing bases of support among different institutional sub-constituencies in the military, but always being mindful of cultivating relations with key allies in the Central Military Commission, central departments, and regional commands. He has hitched his horse to certain individuals, but he has not been afraid to switch positions and abandon some when it was expedient. He has astutely sensed sentiments in the armed forces and adapted his speeches and activities accordingly—a characteristic

²⁵² Li Guoqiang, et al, *Zhonggong junfang jiangling* [High-Ranking Officers of the Chinese Communist Military], Hong Kong: Wide Angle Press, 1992, p. 6. Author's translation.

that previously earned Jiang the nickname "the weathervane" of the "wind faction" (*feng pai*). Jiang's strategy has included several key elements:

- personnel changes;
- supporting military modernization and professionalism;
- being receptive to military sentiments in foreign and domestic policy matters.

After disposing of the Yangs, Jiang Zemin paid close attention to personnel policy in the armed forces. He has personally promoted more than fifty officers to the rank of full general. It is reported that, in the early 1990s, Jiang himself insisted on reviewing the files of any officer recommended for promotion down to the level of division commander.²⁵³ In personnel matters, Jiang has also had to rely heavily on the advice and influence of Generals Wang Ruilin, Yu Yongbo, and Zhang Wannian. Jiang's military secretary (*mishu*) on the CMC, Jia Ting'an, has also played an influential role as Deputy Director of the CMC General Office.

During his tenure as Chairman of the Central Military Commission a wholesale turnover of personnel has taken place in the CMC itself, in the three General Headquarters (General Staff, Logistics, and Political Departments), in Military Region and District commands, at the Group Army level, in elite military academies, and in the paramilitary People's Armed Police. Not since the aftermath of the Lin Biao Affair in the early 1970s or the housecleaning after the purge of the "small Gang of Four" in 1981-82, has the PLA experienced such widespread turnover of personnel. There is considerable evidence that Jiang Zemin has overseen and approved this process, and has been personally engaged in many of the specific removals and appointments. He has certainly benefited from the turnover, even if he cannot claim true personal "loyalty" from many of those promoted. Jiang has overseen the promotion of numerous officers he has met during his tours of the military regions, but otherwise there are really only two examples of promotions directly tied to Jiang: General Ba Zhongtan and his successor General You Xigui as head of the Central Guards Bureau. Thus, in one respect, Jiang has appreciated one of the cardinal tenets of being a Leninist leader—control of the *nomenklatura*—as control of personnel is central to political survival and power in a communist political system. It is also key to policy implementation, as one must be able to trust their subordinates to carry out dictates and implement policy.

Another key facet of Jiang's strategy vis-à-vis the PLA has been to reach out to various constituencies within the armed forces, trying to mobilize as broad a coalition of support as possible (which might be described as "pork barrel politics with Chinese characteristics"). In various ways and at various times, Jiang has played to and placated the political commissars (General Political Department), the military-industrial complex (General Logistics Department and five defense ministries), the

²⁵³ Lu Yushan, "Jiang Zemin Hits Out in All Directions to Consolidate His Strength," *Dangdai* (Hong Kong), 15 July 1994, in FBIS-CHI, 17 August 1994, p. 14.

defense science and technology establishment (COSTIND and GAD), the nuclear forces (Second Artillery), military academies (NDU and AMS), People's Armed Police, the General Staff Department, and all three services. Jiang has at various times supported all the key themes of importance: politicization of the military and loyalty to the Party; professionalization of the armed forces; modernization of equipment, doctrine, and research and development; and protection of state sovereignty and core national security interests. He has been a proponent of "army building," a harsh critic of corruption and laxity, a supporter and then opponent of commercial activities in the PLA, and a proponent of increased military budgets and improved living standards. And throughout he has wrapped himself in the garb of Deng Xiaoping's teachings on "army-building in new historical circumstances."

Jiang has been all things to all quarters, and has demonstrated in his moves toward the PLA the same political strategy he has demonstrated towards other constituencies in the Chinese political system. Jiang is a consummate politician — playing to, balancing, and placating different constituencies. Chinese politics should be thought of as an endless web of bureaucratic and political constituencies that compete and bargain for position and resources within a vertically organized Leninist system.²⁵⁴ In this respect, Jiang is a new breed of Chinese politician, not cut from the cloth of his Leninist or Maoist predecessors (or even his colleagues Li Peng and Zhu Rongji--both of whom show more autocratic tendencies). Rather than commanding, Jiang conciliates and arbitrates between competing interests, trying to build support amongst individual components that can be forged into a broad-based coalition. Jiang is not prone to backroom factional maneuvering or strong-arm tactics, but is capable of both. He is not beholden to one or another bureaucratic or geographic base of support (although he has clearly promoted his colleagues from Shanghai). His inclinations are politically conservative, but this serves him well during times of succession indeterminacy. Prior to 1997 Jiang seemed contemplative, plodding, careful, deliberate, and cautious, but subsequently he has become much more assertive in policy advocacy (including towards the military). Importantly, Jiang Zemin's political style may reveal a move away from a hierarchical Leninist system to a more constituency and coalition-based political system (albeit within a single party system)—more characteristic of other newly industrializing countries and proto-democracies.²⁵⁵

²⁵⁴ See Kenneth Lieberthal and Michel Oksenberg, *Policy Making in China: Leaders, Structures, and Processes*, Princeton: Princeton University Press, 1988; Kenneth Lieberthal and David M. Lampton, eds., *Bureaucracy, Politics, and Decision-Making in Post-Mao China*, Berkeley: University of California Press, 1992; and Susan Shirk, *The Political Logic of Economic Reform in China*, Berkeley: University of California Press, 1993.

²⁵⁵ For more on Jiang Zemin's political style see Bruce Gilley, *Tiger on the Brink: Jiang Zemin and China's New Elite*, Berkeley: University of California Press,

The third facet of Jiang's strategy for earning support from the PLA has been to be more sensitive to PLA concerns in foreign and national security affairs. To some extent, he has had no choice, as the military has asserted itself on several issues of their concern. Also, it is not unnatural for the PLA to express its views on matters of national security — and they have done so with respect to Taiwan, relations with the United States, the U.S.-Japan Revised Defense Guidelines, the denotation of nuclear devices by India, and potential U.S. development and deployment of Theater Missile Defenses (TMD). In all these instances Jiang has been receptive and responsive to military concerns. The closest he has come to being challenged by the PLA came in the wake of the 1995 visit by Taiwan President Lee Teng-hui to the United States. Jiang was held personally responsible by the PLA brass for the policy "failure" that permitted the visit, as he and Foreign Minister Qian Qichen were forced to make self-criticisms before the Central Military Commission during the second week of July 1995.²⁵⁶ Qian was held accountable as he had assured the Politburo Standing Committee that "under no circumstances" would Lee Teng-hui be granted a visa to the U.S.²⁵⁷ Jiang apparently acquiesced at the CMC meeting to PLA demands that a "military option" be activated vis-à-vis Taiwan.²⁵⁸ Immediately following Jiang's self-criticism, the PLA announced two rounds of ballistic missile tests just off the northern coast of Taiwan, undertook conventional military exercises in the Taiwan Strait, and continued nuclear testing in defiance of the international moratorium. On these and others foreign policy issues, Jiang has been sensitive to PLA concerns, but more importantly the military has been forced to defer to civilian management since the mid-1990s. This is another indication that the PLA's policy jurisdiction has been limited strictly to the military realm.

Zhang Wannian

Of PLA members of the CMC, clearly Zhang Wannian is the most important. Although Zhang had unspecified health difficulties in 1997-1998 (reportedly a heart

1998; and Willy Wo-Lap Lam, *The Era of Jiang Zemin*, Singapore: Simon & Schuster, 1998.

²⁵⁶ Interviews with knowledgeable sources in Hong Kong and Beijing, July 1995. Interestingly, one source argued that in Chinese political culture Jiang's self-criticism was an astute move. This source claimed that Jiang's self-criticism was self-initiated, and thus Jiang was able to earn kudos by voluntarily taking blame. He could thereafter position himself to "get tough" with both Taipei and Washington.

²⁵⁷ This was because U.S. Secretary of State Christopher has personally assured Qian of this. Of course, President Clinton overruled Christopher and the State Department.

²⁵⁸ See Willy Wo-Lap Lam, "Get Tough with Taiwan and U.S., Generals Tell Jiang," *South China Morning Post*, 17 July 1995, p. 4; *idem*, "Jiang Flexes Muscles," *ibid*, 26 July 1995, p. 4.

condition), he continues to hold the *de facto* top spot. Zhang emerged as the most senior member of the PLA High Command in 1996-97, a fact underlined by his inclusion as the military representative in the four-member official delegation for the Hong Kong reversion ceremonies (along with President Jiang Zemin, Premier Li Peng, and Foreign Minister Qian Qichen).

Zhang Wannian's background is typical of the new military leadership; he is a soldier's soldier. His age and career bridge the pre and post-1949 periods and make him typical of the "third generation" of military leadership. A career field officer from the Fourth Field Army system (under Lin Biao), Zhang took part in the final campaign of the civil war. His star really began to rise in the wake of the 1979 Sino-Vietnamese border war. Zhang distinguished himself during the war, particularly when he led the 127th Division in the battle of Liang Shan, an offensive that turned out to be one of the PLA's few tactical accomplishments in the war. Zhang consequently was decorated and received personal praise from Deng Xiaoping. This put Zhang on the fast track for promotion. In 1982 he became Deputy Commander of the Wuhan MR and in 1987 was appointed Commander of the Guangzhou MR. While in the latter position Zhang created the PLA's first rapid reaction unit (*kuaisu fanying budui*) and convened the first joint-service exercises—thus establishing two core components of contemporary PLA doctrine. Perhaps for recognition of these achievements, in 1988 Zhang Wannian was promoted to the rank of Lieutenant General, and in 1990 he was shifted to command the important Jinan MR. It appears that Zhang's transfer out of his southern stronghold had to do with Yang Baibing's machinations to rotate commanders and build up a power base loyal to him and Yang Shangkun following the crackdown in Beijing. Yang Baibing personally visited Zhang in Guangzhou in May 1990, apparently seeking Zhang's retirement. Yang was sharply rebuffed, and it took an intervention by Deng Xiaoping and Yang Dezhi to transfer him to Jinan, while replacing him with Deng loyalist Zhu Dunfa.²⁵⁹ This was a significant appointment for Zhang for several reasons. First, as a native of Shandong (Longkou City in Yuanhuang County), this gave him an opportunity to establish his credentials with the important "Shandong faction" in the PLA—many of whom now occupy high positions in the armed forces. Secondly, having worked his entire career in southern and central China, it was important for Zhang to command a military region with a different set of missions. The Jinan MR is home to the North Fleet and is central to contingencies regarding Korea, Japan, the United States, and Taiwan. As the Jinan MR contributed several units to the Tiananmen crackdown (at least one regiment of the 20th Group Army, two infantry divisions from the 54th Group Army, and one division of the 67th Group Army), Zhang thus took command at a sensitive time. Prior to June 4th it was rumored that Zhang sided with Zhao Ziyang and refused to commit Guangzhou MR forces to Beijing, but this does not seem to be the case (airborne rapid-reaction units were dispatched but did not take part in the

²⁵⁹ As recounted in "The Resurgence of Fourth Field Army Veterans," *Kaifang* (Hong Kong), November 1992, p. 25.

assault on the city). Third, having taken his new command, in 1992 the Jinan MR was visited by new CMC Chairman Jiang Zemin. Jiang's tour of Jinan and other MR commands during the previous two years was instrumental in the promotion of new officers to key central-level positions following the purge of the Yang clique, and Zhang Wannian was to be one of the main beneficiaries.²⁶⁰ He soon found himself transferred to Beijing to head the General Staff Department, a position he held until 1995. Being an outsider to central-level positions, possessing a solid set of previous command credentials, having not been involved in politics or closely aligned with any particular faction, all accrued to Zhang's promotion. To be sure, Zhang's unequivocal support for the June 4th Beijing massacre and ties to Zhang Zhen also aided his meteoric rise to the top spot in the PLA. Since joining the Central Military Commission in December 1995 Zhang Wannian has increasingly taken over Zhang Zhen's portfolio of operations, training, tactics, and doctrine. He has closely identified himself with high technology weapons and innovative tactics related to limited war, but his public speeches conform closely to standard rhetoric. In his speeches and published articles, Zhang has also been notably sycophantic in support of Jiang Zemin.

While currently the most senior PLA officer, General Zhang is over seventy years old and he is known to suffer a heart ailment and other health problems. In all likelihood general Zhang will retire at the 16th Party Congress in October 2002. When this occurs, Zhang's influence will still be felt through a number of officers tied to him that have filled important central and regional military posts in recent years. These currently include Beijing MR Commander Li Xinliang, Shenyang MR Commander Liang Guanglie, Guangzhou MR Commander Tao Bojun, Guangzhou MR Political Commissar Shi Yuxiao, Jinan MR Commander Qian Guoliang, Beijing MR Political Commissar Du Tiehuan, Air Force Commander Liu Shunyao, Naval Commander Shi Yunsheng, People's Armed Police Commander Yang Guoping, NDU Commandant Xing Shizhong, and former Nanjing MR Commander Gu Hui. There also remain a number of officers in the Jinan and Guangzhou MRs who were Zhang's subordinates during his time there.

Chi Haotian

The second most important CMC officer is General Chi Haotian. As Minister of National Defense since 1993, Chi has had extensive foreign travel and interaction with foreign military and civilian leaders—including a visit to the United States in December 1996. He has also played a key role in brokering the PLA's growing ties with the Russian military and defense industrial sector. General Chi is thought to be the closest of any PLA leader to CMC Chairman Jiang Zemin, and he has extensive ties with military elders Liu Huaqing, Zhang Aiping, Yang Dezhi, You Taizhong, and formerly to Deng Xiaoping and Xu Shiyou. Chi proved his political loyalties during

²⁶⁰ See David Shambaugh, "China's Commander-in-Chief: Jiang Zemin and the PLA," *op cit*, p. 218.

crucial junctures—as Chief of Staff during the June 4th crackdown (having ultimate command over the troops) and playing a role in coordinating the arrest of the Gang of Four in 1976. Following the 1989 massacre, Chi was a staunch public defender of the actions taken, but also subsequently developed a fierce rivalry with Yang Baibing. His standing has been enhanced since the dismissal of Yang in 1992, and he is a key member of the “Shandong faction” now dominant in the upper echelons of the PLA.

Chi Haotian has had a distinguished career in the armed forces. He joined the PLA in 1944 and fought in several key battles of the Sino-Japanese and civil wars, including the final phase of the famous Huaihai campaign. He was wounded five times in battle and was decorated as a People’s Hero in 1949. He subsequently fought in the Korean War and was again decorated for valor in combat. From 1958-60 Chi studied at the Military Academy in Nanjing under Commandant Zhang Zhen, in the class just before Zhang Wannian (they overlapped by a year). Chi rose to prominence in the Beijing MR in the early-1970s, having been transferred there to serve in a succession of sensitive political commissar posts following the Lin Biao Incident in 1971. Throughout the 1970s he oversaw propaganda in the region, and following the arrest of the Gang of Four was appointed to be deputy editor-in-chief of the *People’s Daily*. When Deng Xiaoping returned to power and became Chief of Staff in 1977, Chi was transferred to be his deputy. Inexplicably, Chi dropped from view in 1982, only to reemerge as political commissar of the Jinan MR in 1985. In 1987 he returned to Beijing to become Chief of General Staff.

Chi Haotian is known to be a key advocate of the politicization of the PLA, particularly the subordination of the army to the Communist Party, but he has also been a public advocate of military professionalization and modernization. Given his background as a political commissar and his exposure to foreign militaries as Defense Minister, Chi is a good complement to the more technical, apolitical, and distinctly less cosmopolitan Zhang Wannian and Fu Quanyou. Chi appears to have few enemies in the PLA (save Yang Baibing) but—aside from Jiang Zemin—neither does he have PLA superiors to whom he is closely tied. His two previous patrons, Marshals Ye Jianying and Nie Rongzhen (both of whom promoted Chi for his role in the arrest of the Gang of Four), have died. His longevity as Defense Minister seems the result of his antipathy for the Yangs, his support for Jiang Zemin, and possibly the support of Zhang Zhen stemming from their days together in Nanjing. Thus, at 69, Chi’s chances of remaining one of the top two or three military leaders during the next five-ten years are good. He is younger than Zhang Wannian and Fu Quanyou and may indeed succeed Zhang Wannian as the most senior PLA member of the CMC following the 16th Party Congress in 2002—but, on the other hand, Chi is also over the retirement age and may well join these other senior officers in stepping down. If he does so, Generals Wang Ke or Cao Gangchuan will probably become the senior vice-chairmen of the CMC.

Fu Quanyou

At present, the third most important member of the new PLA leadership is Fu Quanyou, currently Chief of General Staff and previous head of the General Logistics Department from 1992-95. Fu is another example of the strong professional

background and ethic characteristic of many of the new PLA leadership. Another highly decorated veteran of the Korean and 1979 Vietnam conflicts, General Fu has served in a series of ground force commands along China's minority-occupied restive borderlands throughout his career. A native of Shanxi and veteran of the famous First Corps of the First Field Army, Fu has spent most of his career in the Lanzhou MR—which he wound up commanding in 1990. Fu has the distinction of being a “model soldier,” based on his command of the legendary “Hard Bone Sixth Company.” Fu also fought in the Korean War, and engaged in intensive combat with South Korean troops during 1952. He was noted at this time for his combined use of tanks and artillery. Fu was also selected as the premier student of his class of 1960 at the Nanjing Military Academy. Fu also served as Chengdu MR Commander from 1985-1990, during which time he enforced martial law in Tibet (perhaps working closely with rising Party star Hu Jintao). His lifelong ties to Marshal He Long clearly benefited Fu, although he was purged along with He Long during the Cultural Revolution.

Fu's background has also been that of a soldier's soldier—having experience in strategy and tactics, commanding large numbers of troops, combat experience in large-scale battles, and functional expertise working in artillery, armor, infantry, and engineering corps. His background is ideal to head the GSD and to oversee the modernization of the PLA under the new doctrinal requirements. As Chief of Staff, Fu began to travel more widely overseas, but he is described by those who have met him as being uncomfortable in meeting with foreigners and discussing global strategic affairs (frequently reading from a script), as well as possessing “earthy” personal habits. Fu's age would suggest his retirement in 2002.

Yu Yongbo

The fourth most important member of the CMC is Yu Yongbo, currently Director of the General Political Department. Yu has served as head of the GPD since November 1992, the longest-held position of any member of the High Command. Throughout this period Yu has shown his loyalty to Jiang Zemin. In fact, the Jiang-Yu relationship dates to the 1980s when Jiang was Mayor of Shanghai and Yu director of the political department of Nanjing MR, responsible for liaison with local civilian leaderships. As head of the GPD today, Yu is not only responsible for propaganda and political work in the armed forces, but he also plays a key role in vetting personnel promotions. In this capacity, Yu has worked closely with General Wang Ruilin. The two men had direct responsibility for ferreting out followers of Yang Baibing, following his dismissal in 1992. It was once thought that Yu was a member of Yang's faction, but it seems that Yu was all along reporting to Jiang Zemin and Deng Xiaoping about the Yang's machinations. For his loyalty, he has been maintained in this sensitive position during a period when there has been tremendous turnover elsewhere in the High Command. Yu's age (b. 1939) also suggests retirement at the 16th Party Congress—indeed General Xu Caihou is being groomed to succeed him (see below).

Wang Ke

Wang Ke owes much of his career rise to PLA elder Zhang Zhen, who personally trained him in the Fourth Division of the New Fourth Field Army during the civil war. Zhang Zhen subsequently followed and oversaw Wang Ke's career development. A veteran artillery commander, Wang has been described as a "jack of all guns."²⁶¹ Geographically, Wang Ke has served most of his career in the northwest — primarily in the Xinjiang Military District of the Lanzhou MR. Wang has thus also enjoyed career-long ties to Fu Quanyou, and undoubtedly to the late PLA elder Wang "Big Cannon" Zhen, who oversaw Lanzhou and Xinjiang as his personal military fiefdoms during his lifetime. Wang Ke was also praised by Jiang Zemin during his 1991 tour of Xinjiang, and soon found himself propelled to be Commander of the important Shenyang MR (another example of regional commanders with whom Jiang met during his 1991-92 tours now occupying top positions). Wang Ke is also known to be a leading advocate of reforming tactics in line with the new "limited war under high technology conditions" doctrine. After the Gulf War, Wang submitted a report on Desert Storm to the CMC, which was reportedly well received.²⁶²

Thus, Wang Ke also perfectly fits the profile of the new Chinese military leadership: mid-60s, ground force background, combat experience, extensive regional command experience (in more than one region), functional expertise (artillery in his case), connections to Jiang Zemin and important PLA elders, and an interest in reforming doctrine and tactics commensurate with making the PLA a modern military. Wang will likely remain on the CMC following the 16th Party Congress in 2002. Born in 1932, Wang will turn seventy before the Congress. Even though beyond retirement age, Wang Ke remains several years younger than Fu Quanyou and Zhang Wannian and, for the interests of continuity, will likely remain on the CMC. He may well succeed General Fu as Chief of General Staff, giving his position at the GLD to General Guo Buoxiong (see below), with whom he has some career ties.

Cao Gangchuan

Although relatively new to the CMC (promoted in November 1998), General Cao Gangchuan has rapidly earned the respect and support of Jiang Zemin and other senior members of the CMC. He is also a leading candidate to become a leading officer and vice-chairman of the CMC after October 2002—although, if the retirement age of 65 is strictly enforced, this would not be possible.²⁶³

²⁶¹ "Wang Ke, Commander of the Shenyang Military Region," *Inside China Mainland*, March 1994, p. 83.

²⁶² *Ibid*, p. 84.

²⁶³ Born in December 1935, Cao will be nearly 67 years old at the time of the Congress.

Two characteristics distinguish Cao Gangchuan's career path: expertise in conventional land armaments and ties to Russia. These two attributes were fused together when Cao was promoted to the position of Director of the Military Products Trade Office of the CMC in 1990 and consequently became the PLA point man for negotiating weapons purchases and military cooperation with Russia. For the previous five years Cao had served as Deputy Director of the Armaments Department of the Headquarters of the General Staff Department, and in November 1992 he was promoted to the position of Deputy Chief of Staff with overall responsibility for PLA equipment and weaponry. In 1996 Cao succeeded Ding Henggao as Director of COSTIND, and presided over its dismantling. He had been known to previously express great frustration with COSTIND and its many failings to produce high-quality weaponry. General Cao was therefore the logical choice to be appointed to be the inaugural Director of the General Armaments Department when it was created in 1998 (he may well, in fact, have been responsible for conceptualizing the new body and the revision of COSTIND).

From the time he joined the army at the age of 19, Cao was associated with artillery.²⁶⁴ A native of Henan, he was sent to the Third Artillery Technical School in Zhengzhou. From there he was selected to attend the Russian training School in Dalian. After two years of Russian language study, Cao was sent to Moscow's Artillery Engineering Academy, where he studied for six years. He returned to China in 1963 after the full rupture of the Sino-Soviet Split, but fluent in Russian and with extensive knowledge of the Soviet Red Army's artillery development. For much of the next fifteen years Cao worked in the Ordnance Department of the General Logistics Department, but in 1979 was sent to the frontlines of the Sino-Vietnamese conflict to help coordinate artillery attacks. This earned Cao a place in the advanced class of the National Defense University. After a two-year year stint he embarked on the fast track through the GSD to his appointment as Director of the new GAD. He was promoted to the rank of full general in March 1998, and shortly thereafter became a full member of the CMC.

Wang Ruilin

The fourth ranking member (not including the three vice-chairmen) of the current CMC is General Wang Ruilin. Wang rose not through any of these aforementioned qualities, but rather as an administrator. His current position and career path has been closely tied to the late Deng Xiaoping. Deng chose Wang to be his personal military secretary (*mishu*) in the early 1960s and he became one of Deng's most important confidants and assistants thereafter. When Deng was purged during the Cultural Revolution and sent to work in a tractor factory, he was allowed to select and take one assistant with him; Deng chose Wang Ruilin. During the time

²⁶⁴ Much of this biographical information derives from Jerry Hung, "Cao Gangchuan—Deputy Chief of Staff, People's Liberation Army," *Inside China Mainland*, January 1995, pp. 84-86.

Deng chaired the CMC in the 1980s, Wang acted as director of the CMC General Office — thus handling all confidential material. In this capacity Wang is reported to have routinely represented Deng in CMC meetings and other communications. But Wang's power and influence was not limited to military affairs, as he was also appointed Deputy Director of the General Office of the Central Committee—the key staff position for the Politburo and high-level Party affairs. From the late-1980s Wang also assumed responsibilities as senior secretary of Deng's personal office (*Deng Ban*). In Deng's final years this made Wang quite possibly the most important official in China (similar to the role played by Mao Yuanxin and Wang Hairong during the Chairman's final days). General Wang was the key conduit between the ailing leader and his family (including his powerful daughters), with the Politburo and other senior leaders. This made General Wang a very powerful man—controlling access to Deng and interpreting his wishes and dictates. This office was disbanded following the patriarch's death, but Wang Ruilin continued his duties as a CMC member and GPD Deputy Director.²⁶⁵ In 1992 he also became Director of the CMC's Discipline Inspection Commission.

Not only did Wang Ruilin handle key staff work and confidential material for Deng for thirty-five years, he had the sensitive and difficult job of executing the former patriarch's orders in the armed forces. Probably one of the toughest tasks Deng gave Wang was to weed out and dismantle the Yang Shangkun-Yang Baibing network in 1992-93. As the network was anchored in the General Political Department and the GPD serves as the principal PLA organ for vetting personnel assignments, Wang was installed as Deputy Director in December 1992 (a position he still holds). In engineering the purge of the Yang network, Wang made himself indispensable to Jiang Zemin and his attempts to cultivate support in the PLA. In fact, as a "talent spotter" and individual experienced in high-level military personnel affairs, it is quite likely that Wang Ruilin has been the guiding hand behind assembling the new PLA leadership and carrying out Deng's wishes to help Jiang Zemin solidify loyalties in the military through promotions and appointments. While Wang possesses no independent power base (despite an Eighth Route Army background and being a member, by birth, of the Shandong faction), this role and his work for Deng and Jiang has made Wang an important player in civil-military relations.

Guo Buoxiong and Xu Caihou

In September 1999, at the Fourth Plenum of the Fifteenth Central Committee, two new members were added to the CMC: Lieutenant Generals Guo Boxiong and Xu Caihou. It is assumed that each will move into functional positions in one of the four general headquarters in the next few years. At the time of appointment, General Bo was commander of the Lanzhou Military Region, while General Xu was the political

²⁶⁵ "Deng Office Disbanded — Office Site Handed Over," *Ming bao* (Hong Kong), 25 July 1997, in *SWB/FE*, 28 July 1997, p. G7.

commissar of the Jinan MR. As such, Xu is tipped to replace Yu Yongbo as GPD Director, while Bo may succeed Fu Quanyou as Chief of the General Staff. Both represent the "fourth generation" of military leaders, as they are 57 and 56 years of age respectively.

General Guo rose through the ranks of the Lanzhou MR, serving successively as a squad leader, platoon leader, regimental propaganda cadre, headquarters staff officer, and eventually MR Deputy Chief of Staff. From 1994-97 he was transferred to the Beijing MR, where he had the opportunity to travel abroad with Defense Minister Chi Haotian and domestically with President Jiang Zemin. In 1997 he was sent back to Lanzhou as MR commander. Guo has longstanding career ties to Chief of Staff Fu Quanyou, who was his commander in the 47th Group Army, as well as former Lanzhou MR commander Wang Ke. Eventually, he is likely to succeed one or both in the PLA leadership.

General Xu Caihou has had a career in PLA political work. Geographically, he has spent most of his career in Jilin Military District of the Shenyang MR — although at the time of his promotion to the CMC he worked in the Jinan MR. In Jilin, Xu held a succession of propaganda and GPD jobs. In November 1992, he was transferred to Beijing where he became the assistant to GPD chief Yu Yongbo, but also worked closely with Wang Ruilin. With this backing, Xu is undoubtedly on track to head the GPD following their retirements. In mid-1993, Xu also assumed co-editorship of the *Liberation Army Daily*. This was a sensitive time following the purge of Yang Baibing, and the need to garner control over the GPD apparatus. Xu performed well and was promoted to deputy director of the GPD in July 1994. From 1997 to 1999 he served as political commissar of the Jinan MR.

These are the current proximate players in civil-military relations in China today. The current CMC appears to be relatively faction-free, very professional (rather than political) in its orientation, technically competent, and focussed on implementing the various programs associated with "building an elite army with Chinese characteristics." It is in this body where the nexus of civil-military relations lies, although it is ostensibly a Party organ. This is important, as channels of interaction outside the CMC have been radically reduced in recent years. The PLA no longer has a representative on the Politburo Standing Committee, and its representation on the Politburo is presently limited to Zhang Wannian and Chi Haotian. It will be interesting to see if this changes at the 16th Party Congress, although traditionally there has not necessarily been a military member of the Politburo Standing Committee.

SUMMARY

Although the CMC is *the* most important institution in the Chinese military, and is a central locus of decision making on national security affairs as well as certain important domestic matters, it is also one of the least transparent and accessible institutions in the PLA. It is thus very difficult to research. No CMC records are declassified from Chinese archives and culling basic information about the body is an exercise in frustration. The discussion above has drawn upon some published documentation from China and a few other sources, and has hopefully illuminated the

essential organizational features of the CMC and its current leadership. Yet, clearly, there is far more that remains unknown about the functioning to the CMC. A more detailed exploration of historical records and the *Liberation Army Daily* could illuminate and build a fuller account of this, the most important of all, PLA institutions. This preliminary effort, and that of a few other analysts,²⁶⁶ will hopefully lay the basis for further explorations in the years ahead.

²⁶⁶ See the works of Tai Ming Cheung, Yan Kong, and Michael Swaine cited above.

4. THE GENERAL STAFF DEPARTMENT OF THE CHINESE PEOPLE'S LIBERATION ARMY: ORGANIZATION, ROLES, & MISSIONS

By David Finklestein²⁶⁷

INTRODUCTION

Purpose

This purpose of this paper is to describe and discuss the organization, roles, and missions of the General Staff Department (GSD) of the Chinese People's Liberation Army (PLA). This is an ambitious undertaking for two reasons. First, the GSD is a large organization. Second, the Chinese defense establishment does not consider such information, in any real detail, suitable for public domain consumption. Hence, there is no officially released PLA guide to the GSD available to the public.

Anyone who would like to acquire a relatively detailed organizational understanding of the U.S. Department of Defense, the Joint Staff, the Service Staffs (Army, Navy, Air Force, Marine Corps), or the joint unified and specified commands has a wealth of officially released public data from which to draw upon. Not so for

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China, where even the telephone directories of the most mundane organizations are usually considered controlled items. Odds are, some of this will change over time due to the ongoing efforts within the PLA to institute regulations, laws, and "standard operating procedures" (SOPs). These very efforts will cause the PLA to discuss their own organizations more and more openly in their own publications as they attempt to reform and regulate them.

The point of bringing up the challenges in attempting a paper such as this is to alert the reader at the start that this study cannot be considered conclusive. The very nature of the subject and the nature of the data available predetermines that there will be mistakes, misunderstandings, and missing data points in the pages ahead. Yet, this paper may likely be the most detailed study on the GSD published in English to date.

Therefore, this effort is best viewed as an initial baseline of understanding that deserves to be scrutinized and challenged. It will also need to be updated on a regular basis as new data becomes available and new systemic understanding is gained. This is the beginning, not the end.

The Value of Organizational Studies

By their very nature organizational studies are usually difficult reads. Organizational charts, relationships, hierarchies, mission statements and the like usually fail to elicit much excitement from the casual reader. So why bother? The answer is simple. Through an understanding of organizational structures and organizational processes we can hope to gain a better appreciation for the PLA as a professional military institution.

The PLA is much more than the weapons and equipment it purchases or produces indigenously, though this is what popular discourse about the PLA tends to revolve about. Like any professional military organization, the officers and soldiers of the PLA view themselves and the world around them through their institutions. How they interact with each other is through the medium of their organizations and institutions. How they go about their professional business is shaped by their organizations and institutions. And, hasten to add, how the PLA will modernize and how it plans to conduct combat operations in the future will be determined by its organizations and institutions.

Simply put, an understanding of PLA organizations and institutions must be the starting point for understanding PLA "corporate culture." If that professional culture is not understood, then our understanding of the PLA will never be deeper than our ability to count and categorize weapons.

Sources of Data

As mentioned above, the Chinese defense establishment does not make a study of this nature easy; especially when some of the organizations are involved in sensitive operational matters. At the same time, it is possible to get at the "guts" of the GSD. So what is the basis of this study? What are the sources of data? What are the cognitive filters through which the data has been sifted?

First, the *Directory of PRC Military Personalities* (hereafter, *DPMP*) served as the foundation and superstructure upon which the organization of the GSD was built

for this study. The *DPMP*, produced by SEROLD Associates of Hawaii, offers an extensive listing of PLA personalities by organization based upon Chinese (mainland) open source literature. Its volumes, which go back over more than a decade, are in and of themselves a valuable source for tracking organizational change over the years for many key PLA organizations, not just the GSD.

Second, this study relies very heavily on Chinese mainland press articles, many from PLA periodicals, available through the Foreign Broadcast Information Service (hereafter, FBIS). A very careful reading of these articles (from *Jiefangjun Bao*, *Xinhua*, *Liaowang*, etc.) resulted in the addition of more organizations and sub-organizations to the skeleton constructed by starting off with the *DPMP*. In addition to identifying additional GSD sub-organizations, these articles were absolutely invaluable for providing insights into the roles, functions, and inter-relationships of and between the various GSD sub-organizations. Five years' worth of FBIS holdings were sifted through for GSD-related information. There were literally hundreds of articles that provided snippets of insight. After going through so many articles, one comes to find out that although the PLA does not release organizational data for public consumption per se there are many GSD sub-organizations that are in the Chinese news very often. Examples would be the Mobilization Department and the Military Training Department. Others, however, are almost never discussed in the Chinese press. Examples of these would be the two intelligence departments of the GSD and its Operations Department. Consequently, not all GSD sub-organizations receive equal treatment in length or detail in this study.

Third, some academic secondary source material (books and Internet web sites) was utilized. This was especially the case when there was simply no mainland press coverage for such organs of the GSD as the intelligence and operations departments. Because one's level of confidence in the data decreases the further one travels away from mainland sources, the "foreign" (non-Chinese) academic literature used in this paper receives additional caveats when it is utilized.

The fourth source of information for this study was the extensive open source holdings of Master Sergeant Ellis Melvin, U.S. Army (Retired). Master Sergeant Melvin graciously shared with me organizational data points for the GSD that are the result of decades of open source database building. He not only shared data, but his own analytic comments on various organizations, as well as expert linguistic guidance and support. Without his assistance this study would not be as rich in granularity in some sub-organizations as it turned out to be. Although MSG Melvin provided this assistance, he is in no way responsible for any errors, mistakes, or incorrect assessments that may be folded into this study. Any weaknesses in this paper are solely the responsibility of the author.

What about sources that were not used? Frankly, this study did not utilize to its fullest extent the plethora of publicly available (*gongkai*) Chinese books and magazines produced by the PLA and other mainland publishing houses that sometimes provide incidental insights into the GSD and other Chinese defense institutions. This was strictly a function of having no hardcopy collections at hand. The mainland press is an increasingly rich resource that will be utilized more fully in future iterations of this study.

Finally, one ought to recognize and declare the subjective lenses through which one's research is refracted. Because some "notional" sub-organizations are offered in this paper, and because a good deal of speculation about organizational roles and functions is bandied about, the subjective lens becomes important: it not only has the potential to enrich a study but also has the potential to lead it astray. I worry more about the latter. In my own case, the baggage includes many years of studying the PLA within the context of a professional military career serving in tactical field units from platoon through brigade level, on the staff of a U.S. Army MAJCOM (Major Army Command), as an instructor on the staff of a military academy, and in the Pentagon to include service on the Joint Staff. Therefore, while a student of the PLA, I am also a creature of U.S. military institutional thinking. While these experiences are helpful, one has to work hard not to "mirror image."

With these introductory remarks behind us, we can proceed to the business at hand: the General Staff Department of the Chinese People's Liberation Army.

THE GSD: AN OVERVIEW

The "guts" of this study is in Section IV in which the sub-organizations of the GSD are discussed in detail. But before diving into them some basics and some contextual comments about the GSD are in order.

The GSD in the PLA Hierarchy

The first thing to do is to "fix" the GSD in the hierarchy of the PLA. The GSD (*Zongcanmou Bu*) is one of four "General Departments" directly under the command and control of China's highest-level military organ; the Central Military Commission (CMC) of the Central Committee of the Chinese Communist Party (CCP). The CMC is a party organization and can be considered the Chinese equivalent of the National Command Authorities (NCA) in the United States.

The other three General Departments (*Zong Bu*) are the General Political Department (GPD, *Zong Zhengzhi Bu*), the General Logistics Department (GLD, *Zong Houqin Bu*) and the recently established (1998) General Armament Department (GAD, *Zong Zhuangbei Bu*). The four general departments constitute the second line of organizations in the PLA hierarchy in as much as they fall directly under the CMC.

The next level of military organizations are the headquarters of the three services---the PLA Navy (PLAN, *Jiefangjun Haijun*), the PLA Air Force (PLAAF, *Jiefangjun Hangkongjun*), the Strategic Rocket Forces (also known as the 2nd Artillery or *Er Pao*)---the seven Military Regions (*Jun Qu*), the Academy of Military Science (AMS, *Junshi Kexue Yuan*), and the National Defense University (NDU, *Guofang Daxue*).

As an important point of organizational curiosity we note that the GSD is also the headquarters of the PLA Ground Forces. There is no separate "Ground Force Headquarters" as there is for the PLAN and the PLAAF.

Moreover, it would incorrect to think of the GSD as a "joint" organization as is the U.S. Joint Staff. The GSD is "joint" in its responsibilities, not, by and large, in its personnel makeup and composition. Even though the GSD has "joint" responsibilities for the entire PLA---meaning all of the services---it is dominated by

Ground Force officers. There are likely very few sub-organizations within the GSD to which PLAN or PLAAF officers are assigned. (The Operations Department is probably one of the few GSD sub-organizations with any meaningful number of PLAN, PLAAF, and 2nd Artillery personnel). Indeed, only up until very recently, circa 1998, those few PLAN and PLAAF officers that were assigned to the GSD were required to wear Ground Force uniforms, not the uniforms of their services.²⁶⁸ This state of affairs reflects the degree to which the entire PLA---all of the services---is dominated by the Ground Forces as a matter of historical legacy.

Functions of the GSD

The official PLA description of the general roles and functions of the GSD were publicly stated in February 1997 when the *Liberation Army Daily (Jiefangjun Bao)* carried an article outlining some (but not all) of the major features of the newly revised "Headquarters Regulations of the Chinese People's Liberation Army." These regulations committed to paper the roles and missions of all levels of PLA headquarters and included, for the first time, a separate chapter on the GSD. According to the PLA's own regulations, then:

The Headquarters of the General Staff of the PLA is a military organ of the Central Military Commission (CMC), a leading organ of the military work of the armed forces nation-wide, and the general headquarters of the PLA. Under the CMC leadership, it organizes and leads the military building of the armed forces nationwide and organizes and directs the military action of the armed forces nationwide.²⁶⁹

²⁶⁸ Conversation with PLA officer, 1998.

²⁶⁹ "Expert Group for Revising Regulations of Headquarters, Campaign and Tactics Research Department, Academy of Military Science, Distinct Characteristics, Strategic Advantage--On The Main Characteristics of the Chinese People's Liberation Army Headquarters' Regulations'," *Jiefangjun bao*, 4 February 1997. We take note of the implication in the title of this article that the regulations that govern the GSD and other military headquarters may have been drafted by an experts group at the Academy of Military Science and not within the GSD itself.

The same article goes on to summarize some of the specific responsibilities of the GSD as written in the revised regulations.²⁷⁰ These include:

- Planning, organizing, and directing military operations
- Conducting staff work for the top leadership of the PLA to assist them in decision-making
- Serving as the lead organization in the PLA for military modernization program decisions
- Coordinating the work of the (then) three General Departments
- Administering the military legislation and military legal system
- Providing guidance for logistical support
- Providing guidance for military science research
- Providing guidance for defense science and technology studies
- Providing information support.

Beijing's October 2000 defense White Paper, "China's National Defense in 2000," gave a very brief but similar overall description of the mission of the GSD (which is sometimes referred to by the Chinese as the General Staff Headquarters):

The General Staff Headquarters is the leading organ of all military work of the nation's armed forces. It organizes and leads the military construction of the nation's armed forces, and organizes and commands their military operations. Under it there are departments in charge of operations, intelligence, training, adjutant and force structure, mobilization, etc.²⁷¹

Clearly, then, we can see that the two key roles and functions of the GSD is directing PLA combat operations and directing the plans, programs, and policies that guide the modernization of the PLA--"Army Building" (*junduide jianshe*)--in PLA parlance. These are two enormous tasks.

We also note that although there are separate general departments for logistics and equipment development, the GSD provides them guidance and that the GSD is responsible for "coordinating" the work of the other general departments.

²⁷⁰ This particular FBIS article was likely translated by someone with very little knowledge of military organizations or terminology. Therefore, while maintaining the essence of the GSD responsibilities in the bullets as presented in the article, I have taken some license to use clearer English terms.

²⁷¹ Information Office of the State Council of the PRC, *China's National Defense in 2000*, 16 October 2000.

In a 1997 speech to an enlarged meeting of the GSD's Party Committee Chief of the General Staff Fu Quanyou enjoined "all GSD organs" to "play their full role" in five key areas (below) which also provides some interesting insight into the functions of the of the GSD and its staff officers.

- *The GSD "planning role."* GSD organs should serve as "excellent advisors" to the party Central Committee and the CMC.
- *The GSD "guidance role."* This means GSD organs should take the guidance of the CMC for combat operations and military work and develop specific "implementation proposals."
- *The GSD "coordination role."* GSD organs should work hard at coordination with other organizations.
- *The GSD "rendering service role."* GSD organs should "cultivate the attitude of serving the troops" and try to solve the problems of "grass roots" units.
- *The GSD "exemplary role."* GSD organs should "influence and motivate the troops with their exemplary conduct."²⁷²

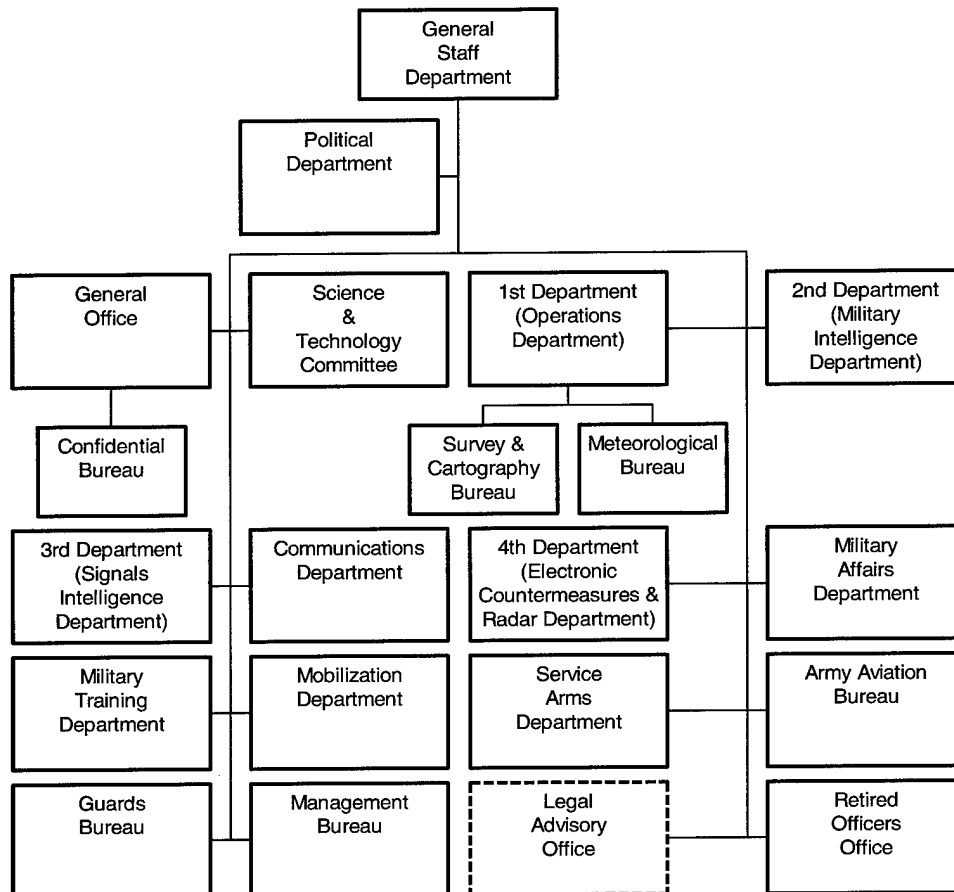
So while the GSD, GPD, GLD, and GAD are technically at the same level in the formal PLA hierarchy the GS is *primus inter pares* and clearly has the lead for combat operations and enabling the PLA's vision for military modernization as set forth under the authority of the CMC.

Organizational Structure of the GSD

To carry out its planning, guidance and coordination responsibilities, the GSD is organized into functionally-oriented sub-organizations.

²⁷² Ma Xiaochun, "Fu Quanyou on 1998 Military Work," *Xinhua*, 17 December 1997, in FBIS.

Figure 4.1 GSD Organizational Overview



Building Blocks

Usually, the largest GSD sub-organizations are called "departments" (*bu*), such as the "Military Training Department" (*Junxun bu*). These major "sub-departments" of the GSD are categorized by the PLA as "Grade 2" departments (*er ji bu*), the GSD itself being considered a "Grade 1" (*yi ji bu*) level organization.²⁷³

²⁷³ For usage of this term in the Chinese press see "PLA Headquarters Launch Three Stresses Campaign," *Xinhua*, 23 June 1999, in FBIS. FBIS translated *er ji bu* as "secondary departments" but in the PLA the character for *ji* usually refers to and is translated as "grade" as in First Grade General or *yi ji shangjiang*.

These "Grade 2" departments are themselves further broken down into "bureaus" (*ju*). Bureaus, in turn, are sometimes subdivided into "offices" (*chu*). Under an "office" usually come "sections" (*ke*).

Some major sub-organizations of the GSD are "bureaus" (*ju*), such as the GSD's Management Bureau (*Guanli Ju*). It is not clear if these sub-organizations are also "Grade 2" departments because they are in fact major organizations in the GSD, or if they would be "Grade 3" (*san ji*) organizations because they are "bureaus" and not "departments."

Protocol Order

As an overall organization, the PLA is keenly aware of its own institutional history. It is also quite sensitive to the "pecking order" of its military leadership, which is not merely based upon formal rank but on such factors as time of entry into the CCP, organizational position, and time in service. Consequently, whenever institutions or individuals are publicly or internally listed in sequence, they are presented in what Western analysts refer to as "protocol order" and what the PLA refers to as "organizational order" (*zuzhi xulie*).²⁷⁴ The criteria for the protocol order of organizations and institutions is primarily a function of when they were formally established. However, sometimes relatively new organizations receive a higher listing than others based upon their relative importance at the time of listing.

To the best that can be determined, the protocol order of most of the major sub-organizations within the GSD is currently listed by the PLA as follows: Operations Department; Intelligence Department; Communications Department; Training Department; Military Affairs Department; Mobilization Department; Service Arms Department; Electronic Countermeasures & Radar Department; and Army Aviation Bureau.²⁷⁵ It should be noted that the organizations discussion of the sub-elements of the GSD in this study (See the section entitled, "The GSD Today") are not necessarily presented in protocol order.

As Viewed From the "Inside"

As we shall see in the sections of this study that follow, most of the sub-organizations of the GSD derive their power and influence over the greater PLA by virtue of the fact that they provide direction, directives, orders, and oversight over the rest of the military in the name of the top leadership of the Central Military Commission (CMC). This is accomplished through the staffs of the Military Regions and the service staffs (Navy, Air Force, and Second Artillery). The GSD is clearly a very powerful organization.

²⁷⁴ This sub-section on Protocol Order is derived from the work of Kenneth W. Allen's introductory chapter in this volume.

²⁷⁵ This listing is not complete. It does not "fix" the positions of other bureaus that part of the GSD.

However, internal to the GSD itself, staff officers view certain organizations to be powerful beyond their protocol order for the simple reason that these key departments or bureaus have as their primary duty the management or support of the GSD. The work of these organizations affect the professional lives and, to some extent, even the personal lives of the staff officers assigned to the GSD. Specifically, we refer to the Political Department, the General Office, and Management Bureau. The Political Department's influence over the rest of the GSD derives from its responsibilities for personnel matters. The power of the General Office is a function of its ability to control access to the top leadership of the GSD—the Chief of the General Staff and the various Deputy Chiefs. The internal clout of the Management Bureau is a direct reflection of the fact that it is responsible for the logistic support of the GSD. (For more details on each of these organizations see the section entitled "The GSD Today").

The Soviet Legacy

It should also be pointed out that the GSD as an organization and institution has been heavily influenced by the military legacies and institutional practices of the Soviet Union. The Soviet influence over many PLA institutions goes back to the late 1920s when Russian advisors were sent to assist the "Red Army." And since the 1920s, and continuing today, unknown thousands of PLA officers have attended Soviet (and now Russian) professional military institutions. So we see in the GSD today what we might term a "Chinese model with Soviet characteristics" whereas in the immediate post-1949 period what we had was a "Soviet model with Chinese characteristics." In fact, knowledgeable individuals point out that in the early 1950s, Soviet military advisors were assigned to the PLA GSD down to and including the *chu* (office) level; a testimony to the impact of Soviet staffing practices on the PLA during its early post-1949 period.

Chiefs of the General Staff 1949-2000

- **Xu Xiangqian: 1949-1954**
- **Nie Rongzhen: 1954 (Acting?)**
- **Su Yu: 1954-1958**
- **Huang Kecheng: 1958-1959**
- **Luo Ruiqing: 1959-1966**
- **Yang Chengwu: 1966-1968**
- **Huang Yongsheng: 1968-1971**
- **Ye Jianying: 1971-1975**
- **Deng Xiaoping: 1975-1980**
- **Yang Dezhi: 1980-1987**
- **Chi Haotian: 1987-1992**
- **Zhang Wannian: 1992-1995**
- **Fu Quanyou: 1995-Present**

Personnel Assigned to the GSD

There is no publicly released official figure for the total number of personnel assigned to the GSD. Moreover, there is almost no empirical basis for estimating this figure because the number of personnel assigned to any one of the major sub-organizations is not known (by this student at least) and even if it were the various sub-organizations are clearly different in size. In addition, one has to differentiate between the numbers of personnel assigned to the GSD serving at headquarters in Beijing, and the number of personnel outside of headquarters assigned to field units that are organic to the

GSD or its subordinate departments and bureaus. At a minimum such units include: Signal Corps Regiments, Engineer Corps Regiments, the regiments of the Central Guards Bureau, Survey & Cartography Regiments, Meteorological Bureau sites throughout the country, the vast number of troops assigned across China that belong to the 3rd Department (SIGINT), and likely others we do not know about. It would not be surprising if the total number of GSD personnel (headquarters and organic field units) were close to 100,000.

GSD Leadership

The usual leadership structure for the GSD is one Chief of the General Staff (CoGS) who usually carries the rank of general (*shangjiang*), a few Deputy Chiefs of the General Staff (DCoGS) at the rank of Lieutenant General (*zhongjiang*), and possibly one or two "Assistants to the Chief of the General Staff" at the rank of major general (*Shaojiang*).²⁷⁶ In practice, over the years, the number of DCoGS's and the number of Assistants to the Chief of the General Staff (sometimes none) have varied depending on the circumstances of the times.²⁷⁷ We are, however, still talking about just a handful of individuals. As of this writing there are five DCoGS's: one whose title is "Executive DCoGS" and four who are referred to simply as DCoGS. At the moment, there is only one Assistant to the CoGS.²⁷⁸ As a general rule over the years, each of the DCoGS's has had a particular portfolio within the GSD for oversight below and for advising the CMC above. The key areas of oversight are usually training, operations, and foreign relations and intelligence. At the *er ji bu* levels of the GSD, we usually find that the Director of a major department is a major general and subordinate bureau directors are senior colonels. We do find exceptions from time to time when a GSD department or bureau director is actually a lieutenant general. For example, the Guards Bureau (*Jingwei Ju*) of the GSD, which is responsible for the physical security of the top CCP and PLA leadership, is usually at the lieutenant general level.

²⁷⁶ It should be mentioned that in the PLA formal military ranks are not "attached" to institutional billets as in the U.S. military. For example, a DCoGS in the PLA could have the personal rank of a Lieutenant General or a General for that matter. In fact, the rank system that matters to PLA officers is one that categorizes them as "company-level officers," "regimental-level officers," "division-level officers," etc. This rating, which is a function of both tenure and performance, determines which types of assignments one is eligible for.

²⁷⁷ Li Guo-Ching lists a near-identical line-up of former CoGS's as that in the sidebar textbox with the exceptions of (1) the addition of Nie Rongzhen (no dates given) and (2) the omission of Ye Jianying. Li Guo-Ching "Deputy Chief of the General Staff Kui Fulin, Special Administrative Region Preparatory Committee Member From General Staff Department," *Kuang chiao ching*, 16 February 1997, in FBIS. Also, Li does not provide dates.

²⁷⁸ See *DPMP*, 1999, p. 17.

Relationship To The Military Regions and The Services

The various sub-organizations of the GSD exercise their authority over the rest of the PLA, carry out their programmatic responsibilities, and perform their oversight functions through counterpart staffs below the level of the GSD.²⁷⁹ Specifically, each of the Service Staffs (PLAN, PLAAF, 2nd Artillery) and the staffs of the Military Regions have departments and bureaus that mirror the key departments and bureaus of the GSD. These are usually to be found in the Headquarters Department of a Service Staff or a Military Region.²⁸⁰ The GSD departments and bureaus draft and issue "circulars" and "directives" (under the authority of either the CoGS or the CMC) to communicate policies or missions to their counterpart organizations below. PLA officers sometimes refer to this process as the "vertical system."²⁸¹ For example, if the CMC has decided that a new training initiative needs to be developed, the Training Department of the GSD will do the staff work that results in draft policies. After the CMC approves the initiative, a directive will be drafted by the Training Department of the GSD that will be sent to the Training Departments of the seven Military Regions and the three services. These, in turn, will be sent further down the chain to "grass roots units." Often times, such circulars and directives will be heralded or further explained by articles submitted to *Jiefangjun Bao* in order to insure maximum attention and compliance with the initiative. Moreover, it appears that GSD staff officers spend a good deal of time travelling around China to educate lower level staffs and units about programs and policies, to inspect units and staffs for compliance, or to "investigate" problems and situations that require GSD-level solutions or fixes.

HISTORICAL BACKGROUND

Pre-1949

The organizational history of General Staff Department as we know it today really begins in 1949 with the establishment of the PRC and the Central People's Government. At that time (1949) the GSD (as well as the GPD and GLD) was subordinated to the People's Revolutionary Military Council of the Central People's Government.²⁸²

There are organizational antecedents that actually go back to the periods of the first civil war (1927-1937), the war against the Japanese (1937-1945), and the second

²⁷⁹ This general description of staff processes is the result of distilling what was learned by studying each of the GSD departments and bureaus in Section IV of this paper.

²⁸⁰ See, for example, the organization of the Guangzhou MR (*DPMP*, 1999, p. 96) or the PLAAF (*DPMP*, 1999, p. 43).

²⁸¹ Comments by PLA officers to author.

²⁸² See *The Chinese People's Liberation Army, Book One, Part 2--Build Modernized, Regular and Revolutionary Armed Forces*, Beijing: Contemporary China Publishing House, 1994, Chapter 5 (hereafter *CPLA*). This citation courtesy of Ellis Melvin.

civil war (1945-1949). However, the pre-1949 general staff system of the "Red Army" was nowhere as complex nor always as empowered as the GSD system that was established after the establishment of the PRC. Indeed, in the 1920s and 1930s the "Red Army" general staff system was whipsawed into and out of existence, and into and out of relevance as a reflection of three sets of tensions:

- First, the policy tensions between those in the CCP who favored irregular warfare and those who believed a more conventional force was needed to combat the encirclement campaigns of the KMT.
- Second, the systemic tension between the traditional regional autonomy enjoyed by the Field Armies of the Red Army and the need of the "center" to direct and coordinate all operations.
- Third, the political and ideological tensions between those in the CCP who favored "Soviet" models of organization, plans and policies (COMINTERN advisors, the "28 Returned Bolsheviks, Li Lisan, etc.) and (for lack of a better term) those "nativists" (Mao and others) who usually rejected out of hand models that did not take the "objective conditions in China" as a starting point.

Needless to say, if one were to provide rationales for all of the organizational changes and developments in the pre-1949 general staff system, one would in effect be writing a lengthy political and military history of the CCP; an endeavor obviously outside the scope of this paper.²⁸³ Consequently, for now it must suffice merely to note and register below some of the key organizational events of the pre-1949 period:²⁸⁴

- **1930:** CMC decides to create a "Red Army" general staff divided into the following sections: operations, training, transportation, intelligence, and industry and agriculture. It is not actually stood up until November 1931. The first Chief of Staff is Ye Jianying.
- **1932:** Liu Bocheng becomes Chief of the General Staff.
- **1935:** General staff name changes to "Chinese Work, Agriculture, and Red Army Headquarters." Liu Bocheng still chief.
- **1936:** Four departments are established under the general staff: (1) operations; (2) intelligence; (3) communications; (4) order of battle.
- **1937:** Name changed back to Headquarters of the General Staff (GSH).

²⁸³ Still probably the best resource in English for understanding the very complex divisions and relationships between the various factions and personalities of the "Red Army" and the post-1949 PLA is William W. Whitson, *The Chinese High Command: A History of Communist Military Politics, 1927-1971*, New York: Praeger Publishers, 1973.

²⁸⁴ The source of this particular list is *Zhongguo junshi baike quanshu* [Military Encyclopedia of China], Beijing: Military Science Publishing House, 1995, pp. 29-34, (hereafter, *MEC*).

- **1938:** GSH is reduced to 3 departments with the "order of battle" department absorbed by the operations department.

Post-1949

As mentioned at the beginning of this section, today's GSD is much more a creature of the post-1949 structure than the organizations in the pre-1949 periods. There are however two important continuities. First, today's GSD, like the pre-1949 general staff headquarters, is a variant of the Soviet general staff system. Second, the GSD is still directly subordinate to the CCP via the CMC, which is a party organ.

Putting the continuities aside, however, the post-1949 GSD was destined to become a complex organization. For one thing, the post-1949 GSD had to reflect the command and control requirements of the national military establishment of a sovereign nation, not that of an "outlawed" revolutionary army as the "Red Army" had been previously. Second, in the last phases of the civil war the PLA had been fighting as a conventional military force, not an irregular force. And within one year of the founding of the PRC, the PLA would be fighting a conventional war once again, this time in Korea. It was not unreasonable that a very large conventional force required a rather large central staff organization.

Looking at the internal organization of the GSD back across time (1949 to today) one is struck by the fact that today's GSD is not all that much different from the GSD that was established in 1949. One sees that some GSD departments or bureaus have come and gone, and others have been merged or moved over time. But the essential structure remains, as do the main departments. Table 4.1 below is a modest attempt to show the GSD organization over time.²⁸⁵ The dates chosen for display in Table 1 are admittedly a function of the availability of data. But these are not insignificant dates either. 1949, of course, is the year of the founding of the PRC and the formal establishment of a GSD. 1959 reflects the results of the "decision" in 1957 to streamline the PLA. Formally known as the CMC "Decision to Reduce Quantity of Armed Forces and Strengthen Quality," (January 1, 1957) the GSD structure was adjusted along

²⁸⁵ Table 1 is based on the holdings of Ellis Melvin (to include the *CPLA*), the *DPMP*, and various open source articles. This table is not definitive. It is the best one can do with the data at hand. For example, the fact that some sub-organizations are not listed under the columns for certain years is not meant to be a definitive statement that they did not exist at that time. What the table does show with a relatively higher level of confidence is the degree of continuity over time on a macro-organizational level.

Table 4.1 GSD Internal Organization, 1949 - 2000

1949	1959	1982	1993	1998-2000
General Office (also GO of CMC)	General Office (also GO of CMC)	General Office	General Office	General Office
Operations Department	Operations Department	Operations Department	Operations Department	Operations Department
Intelligence Department	Intelligence Department	Intelligence Department	Intelligence Department	Intelligence Department
Technology Department	Third Department	Third Department	Third Department	Third Department
Liaison Department				
Communications Department	Signal Corps Department	Communications Department	Communications Department	Communications Department
Military Training Department	Military Training Department	Military Training Department	Military Training Department	Military Training Department
Military Schools Dept				
People's Armed Forces Department	Mobilization Department	Mobilization Department	Mobilization Department	Mobilization Department
Military Affairs Department	Military Affairs Department	Military Affairs Department	Military Affairs Department	Military Affairs Department
Equipment Planning Department	Equipment Planning Department	Equipment Department	Equipment Department	
Military Transportation Headquarters				
Political Department	Political Department	Political Department	Political Department	Political Department
Survey & Cartography Bureau	Survey & Cartography Bureau	Survey & Cartography Bureau	Survey & Cartography Bureau	Survey & Cartography Bureau
Meteorology Bureau	Meteorology Bureau	Meteorology Bureau	Meteorology Bureau	Meteorology Bureau
Military Publishing Bureau				

	Military Communications Department				
	Anti-Chemical Warfare Department	Anti-Chemical Warfare Department			
	Confidential Bureau	Confidential Bureau	Confidential Bureau	Confidential Bureau	
	Management Bureau	Management Bureau	Management Bureau	Management Bureau	
	Guards Department	Guards Department	Guards Department	Central Guards Bureau	Central Guards Bureau
		Artillery Corps Department			
		Armored Force Department			
		Engineer Corps Department			
		Electronic Counter-Measures & Radar Department	Electronic Counter-Measures & Radar Department		
		Foreign Affairs Bureau			
			Service Arms Department	Service Arms Department	Service Arms Department
				Science & Technology Committee	Science & Technology Committee

with the rest of the PLA's national headquarters system. Many students of the PLA forget that by 1955 fully 8 General Departments had been created by the CMC. The "Decision" reduced the number down to three.²⁸⁶ (See Table 4.2 below) The year 1982 reveals the GSD on the eve of the major PLA reorganization of 1985 at which time 1,000,000 troops were demobilized and the former 11 Military Regions were merged into today's 7 MRs. 1993 shows the GSD at the time of the merging of the former technical departments (Engineers, Artillery, Anti-Chemical, Armored Force) into the newly established "Service Arms Department." Finally, 1998 reflects the year that the GSD's Equipment Department was disestablished along with the creation of the General Armaments Department (see Table 4.2).

²⁸⁶ For an excellent overview of the changes in the numbers of general departments over the years see Chang Ching-you, "General Equipment Department's New leaders -- Cao Gangchuan and Li Jinai," *Kuang Chiao Ching*, No. 310, 16 July 1998, pp. 66-68, in FBIS. Table 4.2 is based almost entirely on this article.

Table 4.2 PLA General Departments, 1949 - 2000

	Organizational Action	Number of General Departments
1949 (October)	GSD, GPD, GLD founded	3 General Departments (GSD, GPD, GLD)
1950 4 December)	General Cadres Management Department (GCMD) founded	4 General Departments (GSD, GPD, GLD, GCMD)
1952 (July)	General Cadres Management Department renamed General Cadres Department (GCD)	
1954 (November)	CMC Ordnance Department becomes separate Department: General Ordnance Department (GOD)	5 General Departments (GSD, GPD, GLD, GCD, GOD)
1955 (April)	General Training Supervision Department (GTSD) established by taking the following organizations out of the GSD: Military Training Department, Military School Management Department, Military Publications Bureau.	6 General Departments (GSD, GPD, GLD, GCD, GOD, GTSD)
1955 (June)	CMC establishes Armed Forces Supervision Department (AFSD) as separate Department.	7 General Departments (GSD, GPD, GLD, GCD, GOD, GTSD, AFSD)
1955 (August)	General Finance Department (GFD) created by extracting Finance Department from GLD.	8 General Departments (GSD, GPD, GLD, GCD, GOD, GTSD, AFSD, GFD)
January 1957 to December 1958	January 1957: "Decision to Reduce Quantity of Armed Forces and Strengthen Quality" issued by CMC. Streamlining and Contraction: GFD, GOD, GCD, AFSD, GTSD, all disestablished and their functions absorbed by the GSD, GPD, or GLD. For example, the General Cadres Department ceases to be separate Department and is absorbed under GPD as Cadres Department in October 1958.	3 General Departments (GSD, GPD, GLD)
1998 (April)	CMC establishes General Armaments Department (GAD). Equipment Department of GSD moves over to GAD.	4 General Departments (GSD, GPD, GLD, GAD)

With this background, we now highlight some very few of the key organizational changes that have taken place in the GSD over the years. Clearly, many more changes than those listed below took place. However, the data was not available.

- **1949:** "Headquarters of the General Staff" subordinated to the People's Revolutionary Military Council of the Central People's Government.²⁸⁷
- **1954:** Renamed Chinese People's Liberation Army General Staff Department.
- **1955:** GSD Military Training Department taken from GSD in May 1955 to become part of newly-created Department of the Inspector-General of Training.
- **1956:** GSD Communications Department is redesignated the Signal Corps Department and made directly subordinate to the CMC.
- **1957:** As a result of the CMC "Decision" (see above): (1) the General Ordnance Department is abolished and placed under the GSD; (2) the Department of the Inspector-General of Training and the Armed Forces Supervision Department are abolished and placed under the GSD;²⁸⁸ (3) the Military Schools Management Department and the Publishing Bureau were removed from the GSD and merged; (4) The Management Bureau and the Foreign Affairs Bureau are added to the GSD; (5) the Signal Corps Department is disbanded and moved back under the GSD; (6) the Anti-Chemical Warfare Corps is placed under the GSD.
- **1986:** Army Aviation (rotary wing) created as new branch of the PLA Ground Forces. Placed under GSD. (See Service Arms Department in Section IV).
- **1990:** Electronic Countermeasures & Radar Department established.²⁸⁹
- **1993:** Engineer Department, Artillery Department, Armored Forces Department, Aviation Department, and Anti-Chemical Warfare Department of GSD downgraded to bureaus and placed under newly established Service Arms Department. (See Service Arms Department in Section IV).
- **1998:** Equipment Department removed from GSD and placed under newly created General Armament Department.

THE GSD TODAY

In this section of the paper, the specific roles and missions of the major sub-organizations (departments and bureaus) of the GSD will be discussed to the extent that the data will permit. So too will we break down the major departments and bureaus as

²⁸⁷ Unless otherwise indicated, this chronology is based on entries in the *CPLA*, *ibid*.

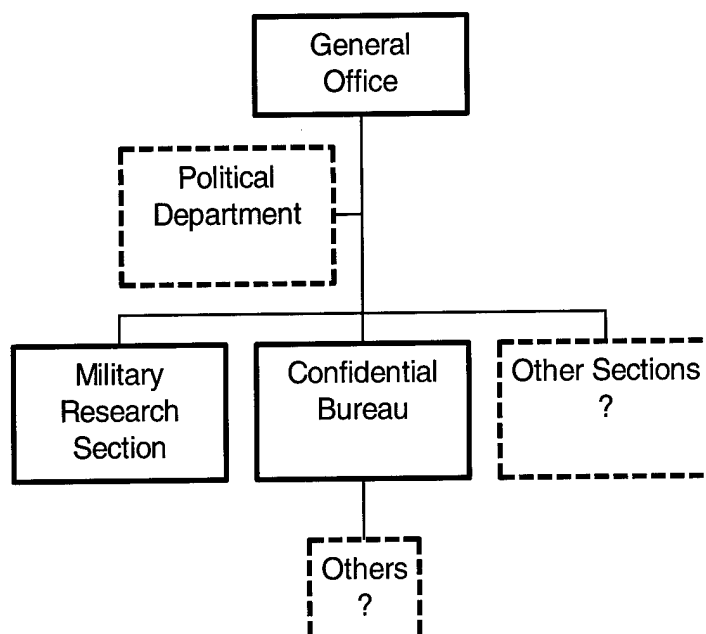
²⁸⁸ The Armed Forces Supervision Department is sometimes translated as the Department of the Inspectorate of the Armed Forces.

²⁸⁹ Some knowledgeable individuals assert the ECM & RD was established in the mid to late 1980s. This cannot be verified at this time.

best we can. In some cases, there is specific information available. In other cases data is lacking and almost nothing can be said with certainty.

However, in some instances where data is lacking we can engage in informed speculation by inference based upon reading articles in the Chinese press, mainly *Jiefangjun Bao*, that mention these organizations; even in passing. In the organization charts that follow, solid-line boxes represent sub-organizations for which we have a near-certain degree of confidence. Broken-line boxes represent sub-organizations for which we have either a very low level of confidence or sub-organizations that are purely speculative on the part of the author. Based on the totality of the research conducted for this study, this author assumes that every major GSD sub-organization has both a Political Department and a General Office. In some cases they are in broken lines (no specific data), in others the lines are solid (specific data).

Figure 4.2 GSD General Office (*Bangongting*)



The General Office serves as the key administrative organ in the GSD that directly supports the top leadership of the General Staff. The General Office likely processes administrative actions that are going from the Chief of the General Staff (CoGS) and the Deputy Chiefs of the General Staff (DCoGS, of which there are currently five) *down* throughout the rest of the GSD organization. Likewise we would expect the General Office to process administrative actions that are going *up* to the key GSD leaders from below in the organization.

Moreover, the General Office also has key extra-organizational liaison and coordination responsibilities. One would expect the General Office to serve as the administrative link with the general offices of other key PLA organizations such as the Central Military Commission (CMC) and the three other General Departments (GPD, GLD, GAD). We would expect administrative links as well as coordination responsibilities with the headquarters of the Military Regions and perhaps other non-PLA national-level organizations in the government and the party.

As mentioned earlier, the General Office is a very powerful organization within the GSD corporate culture. Its director, deputy directors, and perhaps even its staff officers control access to the top GSD leadership, run their schedules and appointments in conjunction with the military secretaries (*mishu*) to the top GSD leadership, and determine which pieces of paper get acted upon in which order from below by the CoGS and DCoGS's. The staff officers of the General Office also draft documents for the top leadership of the GSD and convene meetings in their name.²⁹⁰

Given the fact that the *DPMP* (1999) identifies at least two Major Generals as deputy directors, there are likely multiple sections within the General Office for which there is no information currently available.

We note that the General Office has a Military Research Section. This section is said to conduct research on domestic and international military issues of interest to the top GSD leadership and it likely serves as a small "think-tank" for them.²⁹¹

We also note that under the General Office is the Confidential Bureau (*Jiyao Ju*). In the past, the *DPMP* has carried the Confidential Bureau as an independent bureau. However, recent interviews indicate that some time in the undetermined past, the Confidential Bureau was merged into the General Office. At the moment, this cannot be verified, but this study shall carry the Confidential Bureau under the General Office for the moment.

Although no data for the internal organization of the Confidential Bureau was found it is likely that it performs the same functions as the Confidential Bureau of the Second Department. Specifically, the handling, storage, accountability, and routing of classified and sensitive documents and materials. (See section of paper on Second Department for documentation). It may also be responsible for the encryption and decoding of secure messages.²⁹² In discussing the Confidential Bureau of the CMC, James Mulvenon offers the following:

²⁹⁰ Based on conversations with knowledgeable individuals.

²⁹¹ The basis of including the Military Research Section in the organizational chart and the brief description of its functions is the comments of a PLA officer to the author. The *DPMP* (1999) also lists a Military Research Section under the General Office.

²⁹² The 15 February 2000 issue of *Keji bao* [Science and Technology] (a PRC newspaper) discussed the encryption expertise of a PLAAF officer serving in the Confidential Section of an Air Force Division in the Guangzhou MR. Of note, the officer was a graduate of the PLA Air Force Electronics Engineering Academy. Based on the holdings of Ellis Melvin.

the Confidential Bureau (*Jiyao Ju*)...is responsible for disseminating and protecting all important documents...ranging from personnel dossiers to classified and unclassified policy papers.²⁹³

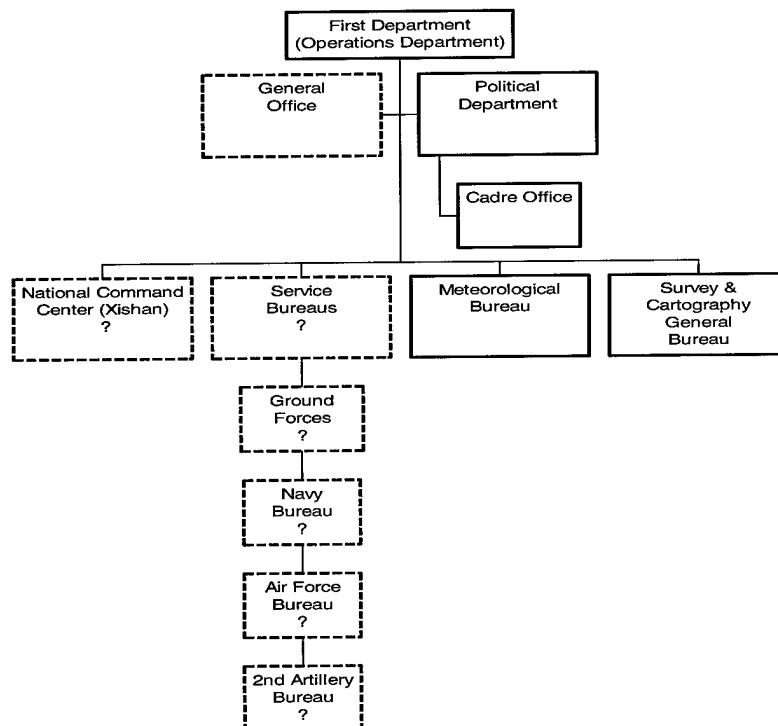
Of interest, Mulvenon finds that within the CMC the Confidential Bureau resides within the General Office of the CMC. Hence, the Confidential Bureau of the GSD may in fact also reside within the GSD's General Office. Of note, it is unclear at this point if the GSD's Confidential Bureau is performing its functions for the entire GSD, acting as a classified internal post office of sorts, or if it is just servicing the top GSD leadership.

Science & Technology Committee (*Kejiwei*)

The functions or roles of this committee within the GSD are unclear and its organization is unknown. It is included due to its listing from time to time in the *DPMP*.

Operations Department (*Zuozhan Bu*)

Figure 4.3 GSD First Department (Operations Department)



²⁹³ Conversation with James Mulvenon, July 2002.

Mission. The Operations Department of the GSD is also known as the First Department (*Yi Bu*). It is universally viewed as "first" in GSD protocol order in recognition of it being one of the first of the "departments" to be established (pre-dating 1949) and its primacy in the organizational hierarchy of the GSD.²⁹⁴

The Operations Department is responsible for developing PLA war plans and tracking Chinese and foreign military activity on a daily basis in peacetime for the top leadership of the PLA. It also exercises national-level command and control over Chinese military operations on behalf of the CMC in time of war.

According to Michael Swaine, whereas the other GSD sub-organizations come under the supervision of one of the various Deputy Chiefs of the General Staff, the First Bureau "is directly under the control of the GSD director."²⁹⁵

The First Bureau is the functional equivalent of the J-3 on the Pentagon's Joint Staff. Assuming the PLA in fact draws up formal operational plans (OPLANS) or the equivalent of contingency plans (CONPLANS), it is the Operations Department that does them. Hong Kong's *Kuang Chiao Ching* ["Wide Angle" magazine] gives the Operations Department mission as "mapping out operational plans" and suggests that, career-wise, the "First Bureau" is likely the organizational heavyweight in the GSD and a prime assignment for those who become its leaders.²⁹⁶

Organization. There is not very much known about the organization of the Operations Department. Much is anecdotal. Some knowledgeable individuals assert that the Operations Department has at least 10 major sub-departments or bureaus.

National Command Center. Some western analysts of the PLA ascribe to the First Department a key role in the manning and operations of the PLA's national military command and control center. According to Major Mark Stokes,

²⁹⁴ Once again, Chinese language periodicals savvy in the ways of the PLA, usually go through listings of the sub-organizations of the GSD (or any organization for that matter) in a protocol sequence. For example, the Hong Kong periodical *Kuang chiao ching* [Wide Angle], which is alleged to have excellent access or ties to the PLA, lists the sub-organizations of the GSD in what many savants consider to be very close to the correct protocol precedence. See Li Kuo-chiang, "Deputy Chief of General Staff Kui Fulin, Special Administrative Region Preparatory Committee Member from the General Staff," *Kuang chiao ching*, 16 February 1999, in FBIS. The protocol in this article is given as: "operations, intelligence, communications, military training, military affairs, armament, mobilization, artillery units, engineering units, anti-chemical units, electronic warfare, radar units, army aviation units, surveying and cartography, and confidential work." We note that not all sub-organizations are listed here.

²⁹⁵ Michael D. Swaine, *The Military & Political Succession in China*, Santa Monica, CA: RAND, 1992, p. 123.

²⁹⁶ Ibid. "This is an important department, a post once held by General Zhang Zhen, (then) Vice Chairman of the CMC, in the early 1950s."

The central headquarters of the PLA GSD C4I apparatus is located in the *Xishan* area of the western suburbs of Beijing. It functions as a communications, intelligence, and combat control center. In short, the *Xishan* command complex is the operational nerve center of the PLA ground units, air forces, navies, and strategic missile forces, similar in nature to the Pentagon's National Military Command Center. The Command and Control headquarters includes the GSD First Department (known as *Zongcan Zuozhan Bu*), key Second Department offices, and the Third Department. The First Department, under direct control of the GSD director, mans the Command and Control Headquarters 24 hours a day.²⁹⁷

Consequently, there is most likely some bureau within the First Department that is responsible for the *Yi Bu* role in command center operations; hence the notional bureau in the organizational chart above. The General Office is also notional. We do know that the Operations Department does have a Political Department and that the Political Department has a Cadre Office under it.²⁹⁸

Service Bureaus. Some students of the PLA assess that each of the services---the PLA Ground Forces, PLA Navy, PLA Air Force, and Strategic Rocket Forces (2nd Artillery)---have a bureau within the Operations Department, a reasonable proposition which is notionally included in this study. Some knowledgeable individuals assert that these service bureaus track and report on the daily activities of their respective services for the CMC in peacetime, and coordinate their activities in time of war.

Two Other Bureaus? In the past, the *DPMP* has consistently carried the Meteorological Bureau and the Survey & Cartography General Bureau as independent organizations within the GSD. However, knowledgeable individuals assert that some time in the undetermined past these two organizations were moved under the Operations Department. There is currently no way to verify this. Therefore, they shall be carried in this study under the Operations Department with the understanding that this may not be correct.

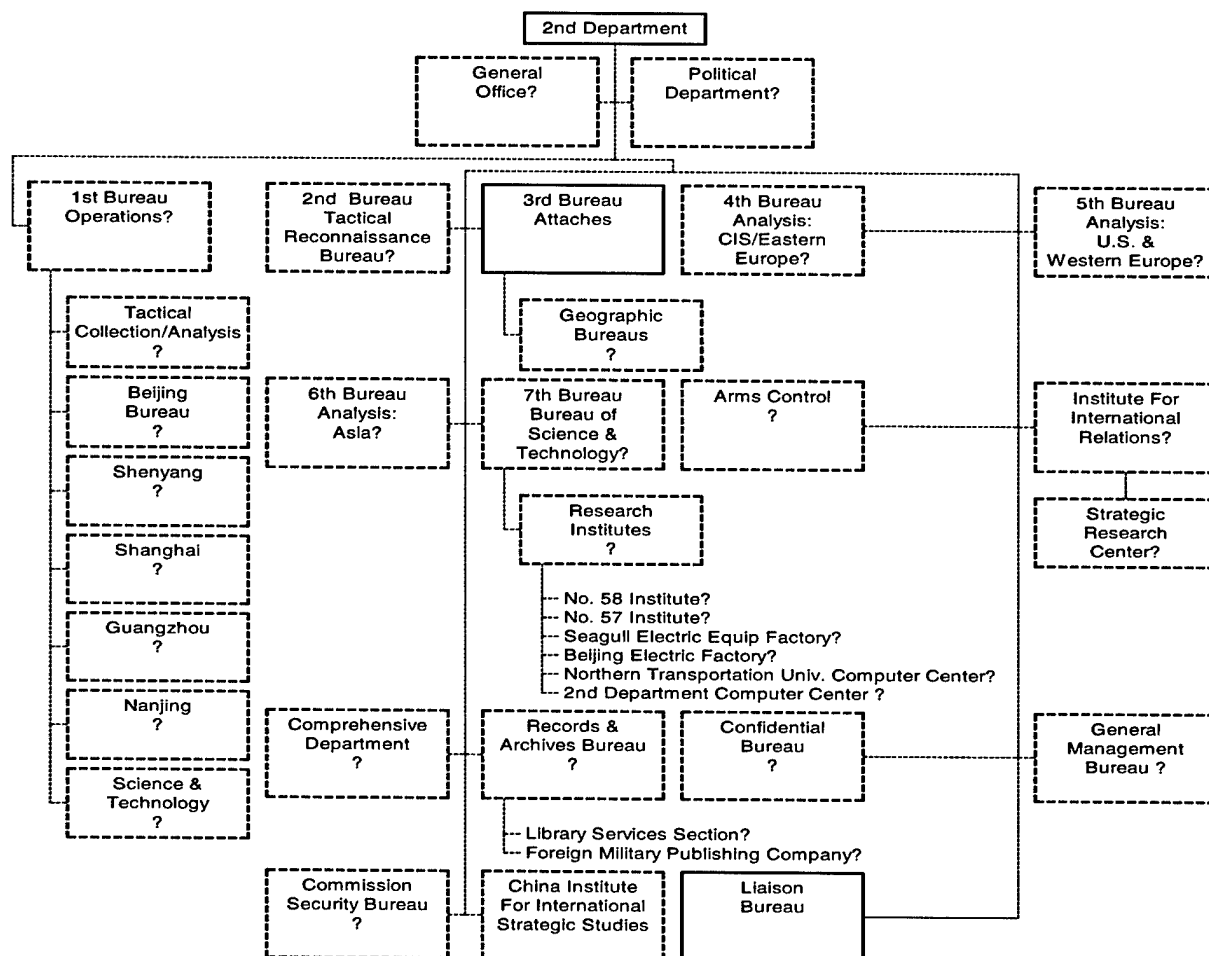
A detailed discussion of the organization, roles, and missions of these two bureaus can be found in subsequent sections of this paper.

Second Department (*Er Bu*)

²⁹⁷ See Mark A. Stokes, *China's Strategic Modernization: Implications for the United States*, Carlisle, PA: U.S. Army War College, 1999, pp. 45-46.

²⁹⁸ *Jiefangjun bao*, 30 December 1999, p. 3.

Figure 4.4 GSD 2nd Department



The GSD's Second Department (or, alternately, Military Intelligence Department, *Qingbao Bu*) is one of two major intelligence organizations under the direct control of the GSD. The other is the Third Department (next section) that is responsible for signals intelligence (SIGINT).

Of all of the GSD sub-organizations discussed in this paper, the Second Department and Third Department are the two that are:

- the most speculative,
- the least grounded in any type of verifiable data, and
- the two in which we should have the least confidence due to lack of data (almost non-existent) in the public domain.

Frankly, given the near-total lack of public domain sources available, it is impossible to know if the organizational discussion that follows has any semblance to

reality. Unlike many of the other sub-organizations of the GSD, there are, for obvious reasons, no insights to be gleaned from a detailed reading of mainland publications such as *Jiefangjun Bao*. Therefore, this section of the paper (and the section of the paper on the Third Department) will be presented in a somewhat different format from others. First, a very brief discussion of the available sources will be presented. And, second, there will be only a simple listing of the sub-organizations in Chart 4 and information about them as presented in the sources at hand.

Sources. This section must of necessity rely on only a meager handful of sources that cannot be verified. First source: the *DPMP*. The *DPMP* lists only one sub-organization under the Second Department---the 3rd Bureau (Military Attaches). It is the only box on the chart that is displayed with a solid line. This is because the *DPMP* usually only lists personalities or organizations which its researchers have found identified in the mainland Chinese press. Therefore, there is certain high-end reliability to its listings. Unfortunately, the *DPMP*, as mentioned, has only one entry for the Second Department. Second source: the Federation of American Scientists (hereafter FAS). The FAS maintains a web site on world intelligence organizations to include the Second Department (and Third Department) of the PLA.²⁹⁹ However, the information on this site is based on articles from the Hong Kong press. As a general rule, the Hong Kong press should usually be considered of low (or at best uneven) reliability.³⁰⁰ Third source: this student found some other Hong Press articles not cited by the FAS site. But here also one should consider these articles as low in reliability. Fourth source: some few insights were provided from the draft of a forthcoming academic volume on the modernization of the PLA.³⁰¹ Fifth source: a 1994 volume, *Chinese Intelligence Operations*, by Nicholas Eftimiades.³⁰² Frankly, this volume is the mainstay of this entire section and the following section on the Third Department. Consequently, a word or two about the volume is in order.

Besides mining open source materials such as academic articles and court case records, the author informs the reader that the volume also incorporated "...dozens of interviews with Chinese dissidents, defectors, and active intelligence officers..." conducted both by the Mr. Eftimiades and by proxy using another researcher.³⁰³ The

299 See <http://www.fas.org/irp/world/china/pla/dept_2.htm> (hereafter, FAS).

300 There are, of course, exceptions to blanket statement. For example, *Kuang chiao ching* [Wide Angle] has a decent track record of explaining ongoing events in the PLA. However, most Hong Press articles are too sensational to be considered good sources in the absence of other corroborating data. But especially in the realm of PRC intelligence issues, our starting point with the Hong Kong press should be a posture of high-end skepticism.

301 Professor David Shambaugh graciously shared some of the raw data from Chapter 4 of *Reforming China's Military*, University of California Press, forthcoming.

302 Nicholas Eftimiades, *Chinese Intelligence Operations* Annapolis, Md.: Naval Institute Press, 1994.

303 Eftimiades, p. 11.

sections of the book of greatest utility for the purposes of this paper are those on organization. This is also the type of information in the volume for which was most dependent upon the interviews (and understandably so). Moreover, the author chose to list his sources only by number: for example, "Source No. 3" (also understandable). What does this mean for *this* paper on the GSD? It means that this student has absolutely no way to gauge the reliability of what is presented in the Eftimiades volume as far as the organization or missions of the Second Department and Third Department are concerned. One does not question in any way that the interviews took place. But neither can one assess the reliability of the information derived from them. Nevertheless, in spite of these reservations, and given the paucity of material on the Second (and Third) Department, this student chose to use the information in the Eftimiades volume as a "baseline" for what should be considered a very, very notional organizational structure. The only other option was to leave a big "blank" for two major GSD organizations. With all of the above caveats and warnings, we can proceed to discuss the Second Department.

Mission. The Second Department appears to have two key missions. First, it is responsible for the collection and analysis of strategic-level military and political intelligence. To a certain degree, its strategic intelligence missions may overlap somewhat with those of the Ministry of State Security (MSS). Second, the Second Department *may* have some responsibility for providing operational-level intelligence to the Military Regions, although there is no authoritative information available to help explain the relationship between the Second Department and the MRs.³⁰⁴

The few sources available on this subject all suggest that the Second Department relies heavily on Human Intelligence, or HUMINT for the collection of raw information. According to the Hong Kong publication *Cheng Ming*:

The Second Department of the PLA General Staff headquarters is mainly responsible for collecting military information, which can be divided into three major parts: First, sending military attaches to Chinese embassies abroad; second, sending special agents to foreign countries under the cover of various identities; and third, conducting military intelligence analysis based on information publicly published in foreign countries.³⁰⁵

Eftimiades refers to the Second Department as, "...the second largest organization in the PRC involved in HUMINT collection" and that its HUMINT operations support "tactical, strategic, and technological" military intelligence requirements.³⁰⁶ He further assesses that the Second Department's key "consumers" are the leadership of the GSD, the

³⁰⁴ See Eftimiades, Chapter 9, for discussion of the role of the Second Department in providing operational intelligence to the MRs.

³⁰⁵ Tan Po, "Communist China's Intelligence, External Affairs Research Organs," *Cheng ming*, 1 September 1996, in FBIS.

³⁰⁶ Eftimiades, pp. 75-76.

leadership of the Central Military Commission, the Ministry of National Defense, the service headquarters, "the military-industrial complex," and "unit commanders."³⁰⁷

Organization. By going through what the sources at hand have provided by way of information on the organization of the Second Department, we will also be able to get a notional glimpse of some of this organization's other missions.

General Office. Strictly notional on the part of this author. This office likely handles the administrative work of the Second Department leadership, controls access to the department's leadership, and acts as the conduit for further coordination up the GSD chain and beyond as well as below throughout the Second Department.

Political Department. Eftimiades asserts the existence of a Political Department under the Second Department:

This unit reports to the General Political Department (GPD) and reflects a system of Party control that is an inextricable part of the Second Department's structure. The GPD is in charge of counterintelligence as it relates to political control and ideological education of the armed forces.³⁰⁸

While the above comments about the relationship of the Second Department's Political Department to the GPD and its alleged counterintelligence functions are otherwise unverified (although reasonable), one of Eftimiades' unnamed numbered sources does seem to have it right when it is suggested that another role of the Political Department is to take responsibility for "officer appointments, promotions, and transfer of personnel."³⁰⁹ Assuming there is a Political Department, it likely has the same generic duties all Political Departments have in each of the sub-organizations of the GSD, and throughout the PLA for that matter, one of which is personnel issues. (See the section in this paper on GSD Political Department).

1st Bureau. The two sources that mention this bureau, the Eftimiades volume and the Federation of American Scientists web site, both assert that the 1st Bureau is concerned with collection (as opposed to analysis). Eftimiades tells us that the 1st Bureau has stations around China that he describes as "geographic divisions." They are: Beijing, Shenyang, Shanghai, Guangzhou, and Nanjing.³¹⁰ According to Eftimiades:

The First Bureau focuses its collection efforts primarily on Hong Kong and Taiwan. However, it also collects against targets world-wide....The five geographically defined divisions also conduct clandestine intelligence operations overseas. For example, the Shenyang division collects against Russia, Eastern Europe, and Japan...The Guangzhou Division also

³⁰⁷ Ibid., p. 75.

³⁰⁸ Ibid., p. 85.

³⁰⁹ Ibid.

³¹⁰ Ibid, p. 79, citing anonymous numbered sources.

appears to collect against targets based on geographic proximity. Its primary targets are persons in Hong Kong, Macao, and Taiwan...The Shanghai and Naniing divisions...target Western Europe and the United States respectively.³¹¹

The FAS web site asserts that, "...the First Bureau is responsible for collecting information on Taiwan and Hong Kong."³¹²

2nd Bureau. Eftimiades is the sole source for the existence of the 2nd Bureau, which he describes as a "tactical reconnaissance bureau" or "*Jun Jiancha Jhu*."³¹³ Eftimiades sees this bureau as coordinating operational and tactical-level intelligence support by Second Department headquarters in Beijing for operational units down in the seven Military Regions. Eftimiades' schema also holds that there are operational and tactical intelligence units down in the Military Regions that support their respective commands but which belong to and are controlled by Second Department headquarters.

3rd Bureau. The 3rd Bureau of the Second Department is responsible for PLA Military Attaches. The *Directory of PRC Military Personalities (DPMP)* has carried a position for "Director, Attaché Department" (of the Second Department) since at least 1988. In 1990, the *DPMP* identified the "Attaché Department" as the "3rd Bureau." Eftimiades offers that, "The attaché bureau, also called the Third Bureau, is subdivided into several groups (*Xiao zu*) on the basis of geography..."³¹⁴ Hence, under the 3rd Bureau on our organization chart we should place notional, subordinate geographic bureaus.

4th Bureau. According to Eftimiades, the 4th Bureau is an analytic organization that focuses on the "political and military policies" of The Commonwealth of Independent States (CIS) and Eastern Europe. Its mission is to "...produce and disseminate in-depth intelligence analyses..."³¹⁵

5th Bureau. Likewise, the 5th Bureau reportedly focuses its analyses on the United States and Western Europe. According to Eftimiades' research, "It uses primarily open-source publications in its political and economic analyses."³¹⁶

6th Bureau. Yet another analytic bureau, the 6th Bureau, we are told, "...focuses its efforts on the Asian nations that border China."³¹⁷

³¹¹ Ibid., pp. 79-80.

³¹² See FAS web site, op. cit. This site cites several Hong Kong press articles in its bibliography on the PLA Second Department, but does not specify the sourcing for this (or nay other) particular piece of information. So as with Eftimiades "numbered sources," all one can say is caveat emptor.

³¹³ The following discussion (what there is of it) of the 2nd Bureau comes from Eftimiades, p. 79.

³¹⁴ Ibid., p. 81.

³¹⁵ Ibid., p.83.

³¹⁶ Ibid.

³¹⁷ Ibid.

7th Bureau. According to Eftimiades, this "functional bureau" is also known as the "Bureau of Science & Technology." The subordinate research institutes listed on the above organizational chart is also provided by Eftimiades who asserts that, the 7th Bureau mission is to "research, design, and develop technology."³¹⁸

Arms Control. There may be an analytic office in the Second Department that is focused on foreign ballistic missile defense systems and arms control issues. This would not be surprising for two reasons: one substantive and one bureaucratic. On the substantive side, Chinese concern about U.S. Theater Ballistic Missile Defense (TBMD) systems, and, most recently, National Missile Defense (NMD) would naturally demand a special analytic focus from both a technical (threat) perspective and from a political-military perspective. The bureaucratic reason for such an organization might be (and here I speculate even further) due to the increasing involvement of the PLA in internal "inter-ministry" meetings on China's policies toward international arms control issues. Moreover, the mere fact that the Ministry of Foreign Affairs (MFA) has its own Arms Control & Disarmament Department might also impel the PLA to have its own office. A PLA arms control analysis organization would fit comfortably into the Second Department given the fact that intelligence and foreign affairs are both usually the portfolio of a single Deputy Chief of the General Staff. But again, this is all speculation on this student's part.³¹⁹

Institute for International Relations. According to Eftimiades and the FAS web site, this institute is directly subordinate to the Second Department. Supposedly located in Nanjing, Eftimiades asserts that, "The Nanjing Foreign Affairs Institute---recently renamed the PLA Institute for International Relations---is the Second Department's school for espionage tradecraft and foreign languages."³²⁰ According to the Federation of American Scientists web site:

The PLA Institute of International Relations at Nanjing comes under the Second Department of the General Staff Department and is responsible for training military attaches, assistant military attaches and associate military attaches as well as secret agents to be posted abroad. It also supplies officers to the military intelligence sections of various military regions and group armies. The Institute was formed from the PLA "793" Foreign Language Institute, which moved from Zhangjiakou after the Cultural

³¹⁸ Ibid., p. 84.

³¹⁹ There is some anecdotal evidence (albeit slight) for suggesting some sort of arms control organization under the Second Department. For example, at major "Track 2" meetings on TBMD some Chinese military attendees are identified as "research fellows" of the China Institute of International Strategic Studies (CISS), a think tank allegedly associated with the Second Department.

³²⁰ Ibid, p. 81.

Revolution and split into two institutions at Luoyang and Nanjing.³²¹

This institute should be viewed as one of many colleges---usually called "command academies"---that the technical branches of the PLA utilize to train and commission officers in their respective branches.

Also worth noting is a *South China Morning Post* article from August 1999 that asserts that the (then) newly appointed Director of the Second Department, Major General Luo Yudong, was previously the "commandant of the Nanjing-based International Relations Academy..."³²²

It is possible that the Institute for International Relations has a sub-unit called the Strategic Research Center." This, however, is based on only two articles and the affiliation is based solely on the author being identified as a researcher in the Nanjing Institute for International Relations Strategic Research Center.³²³

Comprehensive Department. The possible existence of this department comes from the research-in-progress of a forthcoming book on PLA modernization. At this point there is no information on the function of this department. ³²⁴

Commission Security Bureau. Eftimiades is the only source encountered for this unit, the *Zhongwei jingwei ju*.³²⁵ According to his sources, the Commission Security Bureau "is responsible for the physical security of the CMC members and general department heads." It may also have some role in providing for the "physical security of Second Department facilities."³²⁶ This information contradicts this student's understanding of

³²¹ FAS web site, op. cit. Again, no specific citation for this particular information, just a generic bibliography of Hong Kong press. However, this information clearly comes, almost verbatim, from Tan Po's article, "Spy Headquarters Behind The Shrubs--Supplement to 'Secrets About CPC Spies'," *Cheng ming*, 1 March 1997, in FBIS.

³²² Willy Wo Lap Lam, "Unsung General To head PLA Intelligence Unit," *South China Morning Post*, 24 August 1999, in FBIS. The *DPMP* for 1999 lists "International Relations Academy, Nanjing" and the *DPMP* for 1997 lists Luo Yudong as commandant.

³²³ "Roundup Report: PLA Proposes Establishment of East Asian Security System," *Sing Tao Jih Bao*, 24 April 2000, in FBIS. This article quotes from an author by the name of Shi Yinhong, who it states is "a research fellow of the Intelligence Department of the General Staff Department of the mainland's People's Liberation Army..." Possibly a separate article written by this same author in *Zhanlue yu guanli* (March/April 2000, No. 2) identifies Shi as associated with the "Nanjing Institute for International Relations Strategic Research Center."

³²⁴ Shambaugh, chart (in progress) to be included in Chapter 4.

³²⁵ Eftimiades, p. 85 spells this in pinyin as "Zhungwei" but this is probably a typographic error.

³²⁶ Ibid.

the mission of the GSD's Guards Bureau, or *Jingwei Ju*, which also has this mission. (See section on Guards Bureau below).

Confidential Bureau. According to Eftimiades, this bureau is the *Jiyao Ju* in Chinese. His sources also refer to it as the "Secret Documents Bureau." This bureau "...is responsible for handling, and storing classified documents." In addition," according to Eftimiades, "it sets uniform standards for the classification level of documents."³²⁷

A possible piece of corroborative data about the generic roles of "confidential offices" comes from the Korean War. The 28 April 2000 edition of *Jiefangjun Bao* carried an article entitled "The Last 34 Days of Mao Anying on the Korean Battlefield." The article is the result of the recollections of a PLA veteran who served in the "Confidential Office" of the Headquarters of the Chinese People's Volunteers. The article describes the Confidential Office as decoding encrypted messages, registering classified information, accounting for the destruction of classified information, and securing classified messages and documents.³²⁸

Records & Archives Bureau. According to Eftimiades, the sole source for information on this bureau, it is here that open source materials from abroad are catalogued and stored by the Second Department. It has, according to his sources, a "library services section" and "...the Foreign Military Publishing Company, which translates and republishes other nations' military journals."³²⁹

General Management Bureau. According to Eftimiades' sources, this organization "...provides Second Department personnel with logistical support in the form of transportation (cars and buses), office supplies, recreation centers, and food service."³³⁰

Research Institutes. Eftimiades lists the research institutes in the above organizational chart as subordinate to the Second Department. This student found no other information to either refute or corroborate this information.³³¹

Liaison Bureau. This bureau is identified in *Jiefangjun Bao*, but its function was not discussed.³³²

China Institute for International Strategic Studies (CISS). Formerly known as the Beijing Institute for International Studies, it has long been known that this think tank, now CISS, is affiliated with the General Staff Department. In 1985 the late Doak Barnett wrote the following about BISS: "Established in 1979, it is the newest...(think tank)...but clearly it is of importance because of its direct link to the Ministry of National Defense and the General Staff Department." Barnett *implies* a close affiliation with the

³²⁷ Ibid.

³²⁸ Information provided to author by Ellis Melvin who translated the article and provided a synopsis.

³²⁹ Ibid.

³³⁰ Ibid.

³³¹ Ibid., p. 84.

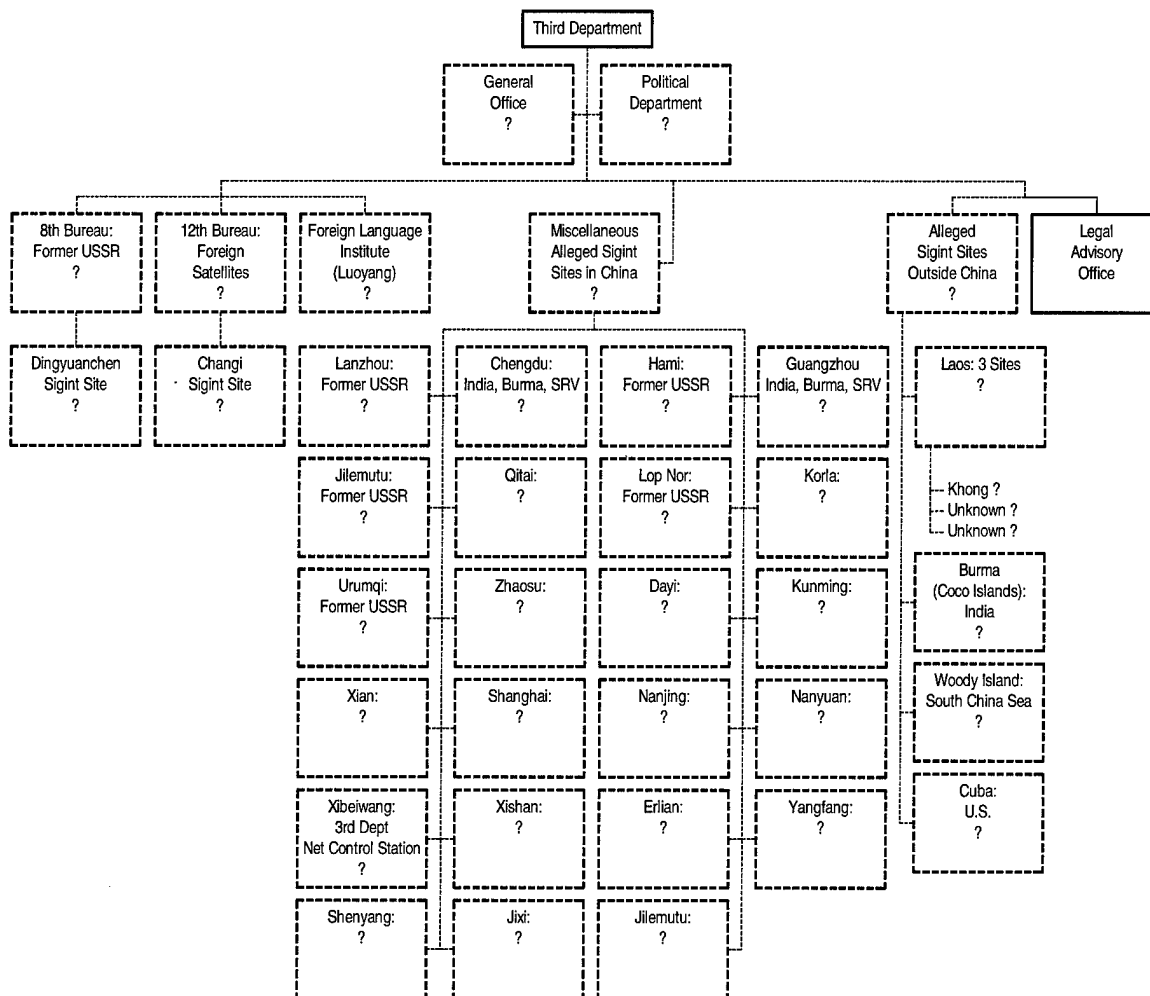
³³² *Jiefangjun bao*, 7 March 1996. The article indicates the bureau had as its Director a Senior Colonel who was subsequently assigned as Defense Attaché to Pakistan with the rank of major general.

Second Department through the founding leadership of the institute and his assessment that "other institute staff members divide their time between the institute and the G-2 division of the General Staff Department."³³³ Eftimiades asserts the linkage more directly, but also relies on Barnett's work.³³⁴ In the context of the Chinese system it would be bureaucratically natural to have CISS fall under the Second Department given that the Deputy Chief of the General Staff who has responsibility for intelligence matters also has responsibility for foreign military relations and analysis of foreign security trends. CISS publishes a journal in both Chinese and English, *International Strategic Studies*, which carries very good articles reflecting Chinese views of international and regional security affairs. It is available to foreigners via subscription.

³³³ A. Doak Barnett, *The Making of Foreign Policy in China*, SAIS Papers in International Affairs, No. 9, Boulder, CO: Westview Press/The John Hopkins University, 1985, pp. 124-126.

³³⁴ Eftimiades, p. 82.

Figure 4.5 GSD 3rd Department



Third Department (*San Bu*)

Mission. The Third Department of the GSD is apparently responsible for "signals intelligence" (SIGINT); meaning the interception, processing, and dissemination of communications transmissions from foreign entities. This department, according to Mark Stokes, is somewhat analogous to the U.S. National Security Agency (NSA). Desmond Ball asserts that the Third Department is also known as the "Technical Department," although there is no way to confirm this.³³⁵

Caveats. The same caveats that apply to the section on the Second Department above apply to this section; we are in highly speculative territory. Indeed, *even less* is known about the Third Department than the Second Department. There is nothing at all that can be stated with any confidence in this entire section of the paper which is why Chart 6 above has lines and boxes in dashed lines and every box has a question mark (?) inside of it. (The one exception is the Legal Advisory Office).

Sources. There are even fewer sources on the Third Department than for the Second Department. The Eftimiades volume has almost nothing to say about this organization other than it exists and it conducts the Sigint function. The Federation of American Scientists web site has a page on the Third Department that relies on a few Hong Kong press articles.³³⁶ One very short article in *Jane's Defense Weekly* talks briefly about alleged Chinese Sigint sites in Laos and Burma but offers no sources.³³⁷ A relatively longer and very interesting article in *Jane's Intelligence Review* by Desmond Ball of the Australian National University is the source of the majority of the Sigint sites listed on the chart above.³³⁸ But here too, no sources are listed. The article merely states that "All references used in preparing this article can be obtained from the editor." Therefore, in this section of the paper, both this student and the readers of this paper are asked to accept a lot on face value. *Consequently, the chart above is not to be considered an organization chart per se but, rather, a way to organize what little open source data there is.*

Organization.

General Office. Strictly speculation on the part of the author based on the assumption that all major GSD sub-organizations have their own administrative centers.

Political Department. Strictly speculation on the part of the author. Assuming that Eftimiades is correct in that the Second Department has a Political Department, then so too might the Third Department have one.

8th Bureau. According to a May 2000 *Washington Times* article, the 8th Bureau of the Third Department is "...the unit in charge of intercepting electronic communications from the former Soviet Union," and that it also targets the Central Asian republics. The

335 Stokes (p. 33) refers to the Third Department, along with the "GSD Electronic Countermeasures and Radar Department" as "China's answer to the U.S. National Security Agency." Eftimiades (ibid., p. 94) asserts that "SIGINT operations are the responsibility of that department." Desmond Ball (see full citation below) tells us that, "The Chinese national SIGINT agency responsible for managing China's strategic SIGINT capabilities and operations is the 3rd or Technical Department of the GSD."

336 See <www.fas.org/irp/world/china/pla/dept_3.htm> Hereafter, FAS.

337 Robert Karniol, "China Sets Up Border SIGINT Bases in Laos," *Jane's Defense Weekly*, 19 November 1994, p. 5.

338 Desmond Ball, "Signals Intelligence In China," *Jane's Intelligence Review*, Vol. 7 Number 8, 1 August 1995, pp. 365-370. This article also provides two maps showing the locations of alleged 3rd Department Sigint sites.

article asserts that one station is located in Dingyuanchen and is "aimed at the Russian border."³³⁹

12th Bureau. The same *Washington Times* article claims that the 12th Bureau is responsible "...for identifying and tracking foreign satellites--namely, U.S. military satellites." The article asserts that one 12th Bureau facility is located in Changi.³⁴⁰

Other Bureaus. If the *Washington Times* article is correct (and we have no way of knowing if it is) then it would stand to reason that the Third Department organization is likely comprised of numbered bureaus (*ju*) that are targeted against specific countries (let's call them "regional bureaus") and other numbered bureaus that are targeted against specific types of communications systems such as satellites, fax, mobile phones, etc. These might be termed "functional bureaus." However, at this point this we are speculating quite a bit. But having said that, if that were the structure of the Third Department, then most, if not all, of the sites listed on Chart 6 above under "Miscellaneous Alleged Sigint Sites in China" would then likely fall under either a numbered "regional bureau" or "functional bureau."

Foreign Language Institute. Within the PLA military intelligence *xitong* (or community) this school is apparently the "sister institute" to the Second Department's Institute of International Relations. According to the Federation of American Scientists:

The PLA Foreign Language Institute at Luoyang comes under the Third Department of the General Staff Department and is responsible for training foreign language cadres for the monitoring of foreign military intelligence. The Institute was formed from the PLA "793" Foreign Language Institute, which moved from Zhangjiakou after the Cultural Revolution and split into two institutions at Luoyang and Nanjing.³⁴¹

Miscellaneous Sigint Sites in China. Obviously, this is not a sub-organization of the Third Department, but rather a listing of alleged Sigint sites. All of the alleged site locations on Chart 6 come from the Ball article.³⁴² In each box on the chart is the alleged location of the site and target of its collection efforts. Ball asserts that the Third Department's "net control station" is located in Xibeiwang, in the northwest (Haidian District) quadrant of Beijing. We are not told what this net control station does.

Alleged SIGINT Sites Outside of China. There is some open press reporting that asserts that the Third Department does have a few SIGINT sites located outside of China. Robert Karniol of *Jane's* reported in 1994 that Vientiane had allowed Beijing to place three collection sites within Laos' southern province of Champasak; one in Khong and the

³³⁹ Bill Geertz and Rowan Scarborough, "Inside the Ring: China Eavesdropping," *Washington Times*, 5 May 2000.

³⁴⁰ Ibid.

³⁴¹ FAS, web page

³⁴² Ball, *ibid*, p. 366.

two others at unknown locations.³⁴³ Karniol also mentions that China has SIGINT sites in Burma, but does not provide a location. Ball, however, refers readers to previous *Jane's* reporting in 1992 that passed on rumors that Burma had permitted the Third Department to establish Sigint sites in the Coco Islands in the Andaman Sea; presumably to monitor India.³⁴⁴ Moreover, Ball states that "...a SIGINT station has evidently been established on Rocky Island (*Shi-tao*), near Woody Island (*Lin -tao*) in the Paracel Archipelago" for coverage of the South China Sea.³⁴⁵ Finally, highly speculative U.S. press reporting from 1999 alleges that there may be some Chinese-Cuban collaboration at a Cuban SIGINT site at Lourdes originally established years back with Soviet assistance.³⁴⁶ If any of these sites do exist, then it somewhat undercuts the oft-heard PLA mantra that China does not station troops abroad.

Legal Advisory Office. Jiefangjun Bao has referred to this office in at least one article in the past.³⁴⁷

Internal Monitoring. As a collateral mission, some who have written about the Third Department assert that it also monitors internal PLA communications as well as foreign communications. One Hong Kong journalist views the monitoring of internal PLA communications as another control mechanism over the PLA:

By taking direct command of military communications stations based in all parts of the country, the CPC Central Military Commission and the PLA General Staff Headquarters can not only ensure a successful 'interception of enemy radio communications,' but can also make sure that none of the wire or wireless communications and contacts among major military regions can escape the ears of these communications stations, thus effectively attaining the goal of imposing direct supervision and control over all major military regions, all provincial military districts, and all group armies.³⁴⁸

³⁴³ Kaniol, p. 5.

³⁴⁴ Ball, p. 367.

³⁴⁵ Ibid.

³⁴⁶ See, James Suchlicki, "Those Men In Havana Are Now Chinese," *Wall Street Journal*, 30 July 1999; Charley Reese, "China and Cuba: Making The Most Of Our Time In Yugoslavia," *Orlando Sentinel*, 6 May 1999; and Andres Oppenheimer and Juan O. Tamayo, "Fears Grow As Russians Work On Cuba Base," *Miami Herald*, 5 March 1999. Clearly, none of these sources are authoritative, but the possibility of Cuban-Chinese Sigint cooperation is intriguing.

³⁴⁷ *Jiefangjun bao*, 12 December 1999. From the holdings of Ellis Melvin.

³⁴⁸ Huang Yung-nien, "Intelligence Background of Zhou Borong, deputy commander of Hong Kong Garrison," *Chien Shao*, 1 April 1996 (FBIS). Desmond Ball

While this might sound a bit draconian---and a bit melodramatic which is often true of the Hong Kong press---the fact of the matter is that monitoring PLA internal communications is a credible mission for spot-checking operational security (OPSEC) of the forces in the field, if not for "loyalty checks."

Relationship To MRs. There is some confusion in this student's mind over who controls strategic-level Sigint units in the MRs; is it the Third Department Headquarters in Beijing or the Commander of the Military Region? Most likely, the former is the case, but we just are not sure from the information available. Desmond Ball provides the following:

The principal SIGINT collection and processing stations are operated by the 3rd Bureaus attached to the headquarters of each of the military regions i.e. Beijing, Shenyang, Chengdu, Guangzhou, Lanzhou, Jinan, and Nanjing. These bureaus also control several subsidiary SIGINT stations in each of their respective regions.....³⁴⁹

and,

The large ground stations operated by the 3rd Bureaus of the 3rd Department are attached to the headquarters of the seven military regions. Accordingly, they have different functional and geographic responsibilities, for example: the 3rd Bureau's station at Lanzhou is responsible for monitoring Russian signal traffic and has the critical mission of providing strategic early warning of a Russian missile attack...³⁵⁰

The meaning of the word "attached" is difficult to understand from the context of the discussion.

On the other hand, Hong Kong journalist Huang Yung-nien of *Chien Shao* leaves no doubt that the MR staffs and the MR commanders have almost no authority over the Third Department organizations that operate within their regions.

the communications stations are entirely the 'agencies' of the Third Department of the PLA General Staff Headquarters which have no affiliations to the provincial military district and the military region of where they are based...the personnel composition, budgets, and establishments of these communications stations are

(p. 367) also briefly mentions the Third Department mission of monitoring internal communications.

349 Ball, p. 366.

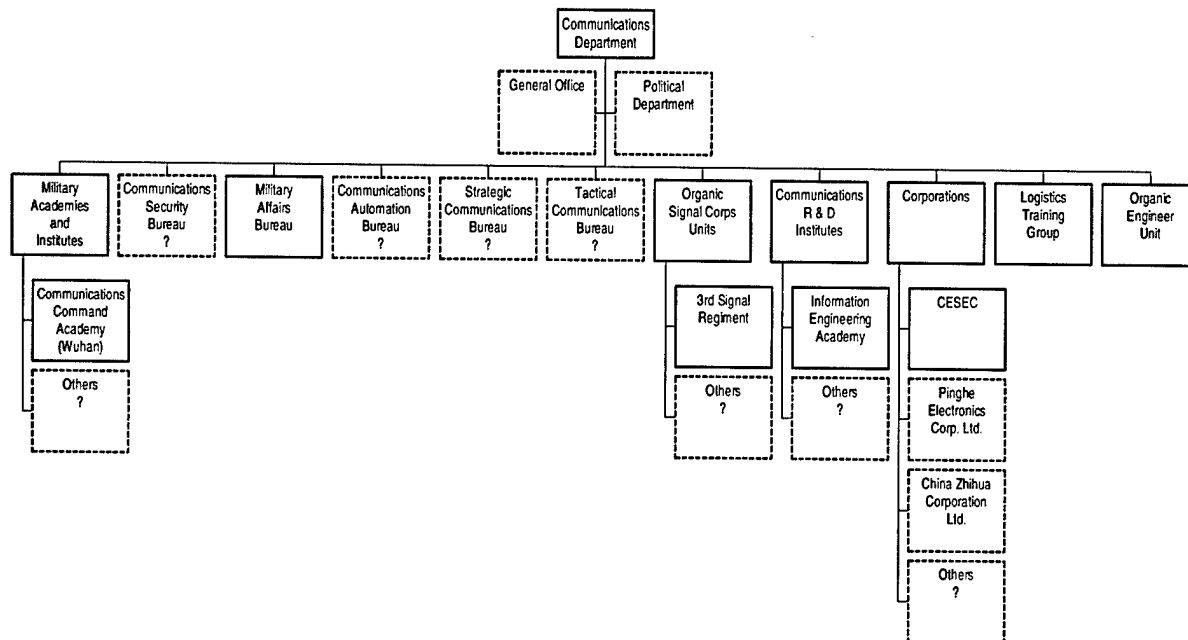
350 Ibid., p. 367.

entirely under the jurisdiction of the Third Department of the PLA General Staff Headquarters, and are not related at all with local troops.³⁵¹

But having presented this last interpretation, the fact is that neither Ball nor Huang give us any indication of how reliable their information is, so we really cannot come down on either side ("attached" or "independent") of the question about who controls Sigint assets in the field.

Communications Department (*Tongxin Bu*)

Figure 4.6 GSD Communications Department



The Communications Department is the headquarters for the PLA Signal Corps. But it is much more than just a "branch" of the PLA ground forces. It is the national-level organization responsible for all aspects of military and strategic-level communications and automaton. It has no single counterpart in the U.S. military establishment. Like most departments of the GSD, the various functions it performs are found imbedded in multiple U.S. defense organizations. In the U.S., the Communications Department's (CD) roles and missions would cut across portions of the mandates of the following organizations:

351 Huang, "Intelligence Background of Zhou Borang."

- The Defense Information Systems Agency;
- The National Security Agency;
- The J-6 on the Joint Staff;
- The Director of Information Systems for Command, Control, Communications & Computers, U.S. Army;
- The U.S. Army Information Systems Command;
- The U.S. Army Signal Center and School at Fort Gordon; and
- The U.S. Army Signal Branch Management Office, to name just a few.

Although there is no definitive data spelling out specific CD responsibilities, portions of its probable mandate can be clearly inferred from reading the Chinese press. Its roles, missions, and activities appear to include:

- Developing, constructing, operating, and maintaining the PLA's China-wide operational military command and control system, and the PLA's administrative communication system (the "All-Army Public Data Exchange Network")³⁵²
- Probably installing, manning, and maintaining the C4I systems in the PLA's national command and control center in the Western Hills (*Xishan*) district of Beijing,³⁵³
- Working with civilian ministries at the national and provincial levels to enhance China's national communications infrastructure,³⁵⁴

³⁵² See Tang Shuhai, "All-Army Public Data Exchange Network Takes Initial Shape," *Jiefangjun bao*, 18 September 1995 (FBIS). "The army data exchange network is responsible for the all-army automatic transmission and exchange of military information in data, pictures, charts, and writing..." The article asserts the network was begun in 1987. The PLA signal corps has trained over 1,000 technicians so far, it is claimed, to operate and maintain the system that covers "all units stationed in medium and large cities across China and along the coast."

³⁵³ Swaine, pp.122-127. Swaine asserts that "The central headquarters of the PLA command and control apparatus is located in the Western Hills area of Beijing. It functions not only as a communications center, but also as an intelligence center and a command and control center." Assuming Swaine is correct in this assertion, then it would stand to reason that the Communications Department would have responsibility for communications in the center. Stokes also asserts the existence of the Xishan complex and mentions secure telephone links, landline comms, and in the future, strategic SATCOM and VSAT links down to the division level from Xishan. See Stokes, pp. 45-46.

³⁵⁴ The Communications Department has been instrumental in working with the Ministry of Posts and Telecommunications since 1993 to construct a massive nation-wide

- Providing guidance to and oversight of the communications departments in the Military Regions,
- Developing and disseminating strategic, operational, and tactical-level combat communications doctrine for the rest of the PLA,³⁵⁵
- Managing high-technology communications research and development institutes that are likely organic to the CD,³⁵⁶
- Exercising operational and administrative control (OPCON and ADCON) over strategic-level military communications units (probably mobile and fixed-station units) that are organic to the CD,
- Probably working with other GSD departments such as the Training Department to promulgate training regulations and standards for Signal Corps officers, NCOs, and troops,
- Managing military academies that train officers, NCOs, and soldiers for the PLA Signal Corps,³⁵⁷
- Likely responsible for developing information warfare doctrine,³⁵⁸
- Providing emergency communications and assisting in the restoration of local communications in the interior during natural disasters,³⁵⁹

fiber-optic cable system. See "PLA Helps With Optic-Fiber Cable Production," *Xinhua*, 13 November 1995 (FBIS), and Guan Tang and Qiao Linsheng, "Units and People Jointly Lay 10,000-Kilometer Optical Fiber Cable Lines," *Jiefangjun Bao*, 9 November 1995 (FBIS).

355 Cheng Gang and Guan Ke, "Beijing Hosts Ceremony Celebrating Publication of 'Military Communications'," *Jiefangjun bao*, 10 January 1999 in FBIS.

356 "PLA Develops Mobile Satellite Communications Antenna," *Xinhua*, 14 December 1999, in FBIS. Asserts that "a certain communications technology research institute under the General Staff Department" recently developed a phased-array antenna for satellite communications, thereby achieving "the goal of mobile communications and improving the rapid-reaction capability of its troops."

357 Luo Yuwen, "Zhang Wannian Attends Lecture on Military Communications," *Xinhua*, 22 April 1999, in FBIS. This article mentions in passing a "communications Commanding Institute." Cheng Gang and Guan Ke (ibid.) refer to this institute as the Communications Command Academy.

358 This is based very tentatively on an article by Major General Yuan Banggen, "Setting Eyes on Development, Stepping Up Research in Information Warfare Theories and Construction of Digital Forces and Digital Battlefield," *Junshi Kexue*, 20 February 1999, in FBIS. See Liu Dongsheng "Telecommunications: Greater Sensitivity Achieved--Second Series of Reports on Accomplishments of Economic Construction and Defense Modernization," *Jiefangjun bao*, 8 September 1999, in FBIS.

359 Hsiao Yueh, "Jiang Zemin Orders PLA to help Combat Floods, Zhang Wannian Orders Emergency Troop Deployments," *Ching pao*, 1 September 1998, in FBIS. According to this article the Communications Department of the GSD provided

- It is *possible* (just speculation at this point), that the CD shares responsibility for frequency management nation-wide with the Ministry of Information Industry (MII), which was recently formed by merging the former Ministry of Posts and Telecommunications and Ministry of Electronics Industry) and finally,
- The CD reportedly has a role, along with other national-level military and civilian organizations, in providing communications and automation security,
- Finally, the CD apparently designs, develops, installs, and maintains communications and data networks for other PLA entities that require long-haul communications for non-operational applications. For example, the CD was instrumental in the development of the GPD's "All-Army Propaganda and Cultural Information Network," established in 1999.³⁶⁰

Although the PLA was ordered to divest itself from its business enterprises in 1999, and PRC officials claim the divestiture has been accomplished, it is likely that the CD continues to operate its various former telecommunications and computer concerns. By some accounts, the PLA (read, Communications Department) is becoming even more deeply entrenched in the commercial telecommunications sector.³⁶¹ Previous direct Communications Department concerns included China Electronics Systems Engineering Corporation (CESEC), and may also have included Pinghe Electronics Corporation, Ltd., and China Zhihua Corporation, Ltd.³⁶²

It is very clear that aside from its role in managing the PLA's military communications systems the CD is already a leading player in the modernization of China's national telecommunications infrastructure. There are ample examples of the Communication Department's involvement in this endeavor and the trend seems to be one of partnering more and more with Chinese corporations and universities to assist in the development of commercial telecommunications systems with direct military applications.

But while the Chinese press is ample on the commercial and infrastructure-building aspects of CD work, it is extremely difficult to find open source articles that discuss its responsibilities in the more traditional role of managing and directing tactical,

mobile radio stations, ultra short wave communications, cellular phones, and generators to both restore local communications and support other PLA relief efforts. See also Ma Xiaochun, "PLA Rushes Funds, Equipment to Flooded Areas," *Xinhua*, 25 August 1998, in FBIS.

360 "Yu Yongbo Reviews Military Propaganda Network," *Xinhua*, 26 December 1999, in FBIS.

361 Mark Magnier, "Chinese Military Still Embedded in the Economy," *Los Angeles Times*, 9 January 2000, p. 1. See also Andrew Chetham, "PLA Muscling Into Sector With Separate Network," *South China Morning Post*, 11 June 1998.

362 "China's Defense-Industrial Trading Organizations," Defense Intelligence Agency Reference Document, PC-1921-57-95, October 1995.

operational, and strategic-level military communications---providing C4I to warfighters. However, one short but telling article in *Jiefangjun Bao* listed the basic elements of the PLA's military communications network and it provides some idea of the type of networks over which the Communications Department presides.³⁶³ It includes:

- a military telephone network (unsecure)
- a secure telephone network
- the "All-Army Data Communication Network" (probably the "All-Army Public Data Exchange Network" referred to above)
- a "comprehensive communication system for field operations" which "integrates sound, light, and electronics, with air, ground, underground, and submarine links." (Likely the tactical/operational network that also incorporates fiber-optic cable and satcom).

Yet a second article refers to the PLA's communications system as comprising:

- underground networks of fiber-optic cables,
- communications satellites,
- microwave links,
- short-wave radio stations, and
- automated command and control networks.³⁶⁴

What this probably means is that the CD likely has many, many organic units and troops that are both involved in fixed-station facilities (for example HF, microwave, satcom, telephone switching facilities, or even tropospheric scatterer units) as well as mobile (deployable) strategic-level communications packages. It also likely means that the CD has organic maintenance and logistics units up through depot-level dedicated to the repair, supply, maintenance, testing, and calibration of such equipment and "housekeeping" responsibilities for the facilities that house them. If one had access to the figures involved it would not be surprising to learn that the Communications Department has direct control over multiple thousands of PLA "communicators in the field" that are *not* organic to the units within Military Regions but that are direct CD assets.

In the final analysis, it would appear that the overarching major military mission of the Communications Department is to plan and direct the complete overhaul and modernization of the PLA's operational and administrative communications networks. In effect, the CD is charged to create a telecommunications system capable of supporting the PLA's operational aspirations to fight "Local Wars Under Modern High-tech Conditions."

³⁶³ Cheng Gang and Li Xuanqing, "Military Telecommunications Building Advances Toward Modernization With Giant Strides," *Jiefangjun bao*, 17 July 1997, in FBIS.

³⁶⁴ Li Xuanqing and Ma Xiaochun, "Armed Forces Communications Become Multidimensional," *Xinhua*, 16 July 1997, in FBIS.

In this regard, the Communications Department is leading what PLA communicators refer to as the "Six Changes" in military communications. These include "changing":

1. from analogue communications to digital communications,
2. from electric cables to fiber-optic cables,
3. from single-purpose terminals to multi-purpose terminals,
4. from mechano-electrical switching systems to automated switching systems,
5. from single operation (single-tasking) networks to comprehensive (multi-tasking) networks, and
6. from manual management of telecommunications systems to automated and "intelligent" systems management.³⁶⁵

Given all of the roles and missions described above, one would suspect that the CD is a rather large organization within the GSD, with multiple "bureaus" and "offices" under it. But while our ability to parse Communications Department responsibilities is respectable, the same cannot be said for its specific organization. The best we can do is create a notional organizational chart (see Figure 4.6 above) in which we list organizations for which we have data (solid lines) and speculate about what ought to be there (dashed lines) given what we know. Clearly, this not very satisfying.

Military Academies and Institutes. There is no question that the CD has its own teaching academies and institutes.³⁶⁶ But whether there is a separate bureau within the Communications Department that manages them (in conjunction with the Military Training Department) is not known.

Communications Security Bureau. Strictly notional on part of the author. There is likely some organization within the CD that deals exclusively with "COMSEC" issues.

Communications Automation Bureau. Strictly notional on part of the author. Likely works on automation and automation security.

Strategic Communications Bureau. Strictly notional on part of the author. There is likely some separate bureau that attends to issues associated with strategic-level fixed telecommunications; a very different world apart from tactical communications. This probably entails communications support to the national command authorities and other national-level PLA organizations. This organization would also provide manning, operations, and maintenance of the communications links within the PLA national command center at Xishan.

³⁶⁵ Cheng and Li, See also Li and Ma,.

³⁶⁶ The Communications Command Academy (Wuhan) is identified in the *DPMP* for 1999 (p. 206). It may well be that the newly created (July 1999) PLA Science & Engineering University comes under the Communications Department. At the moment, it is discussed in the section of this paper that discusses the Service Arms Department of the GSD and, for the moment, listed under the SAD, not the Communications Department.

Tactical Communications Bureau. Strictly notional on part of the author. Looks "down" to the Military Regions and below. The issue is communications support to war-fighting units at the operational and tactical levels of warfare.

Organic Signal Corps Units. Probably regiment or brigade-sized units under direct control of Communications Department in both fixed station and mobile configurations. One unit was identified: the 3rd Signal Regiment.³⁶⁷ These units (1) enable national military command and control communications and (2) probably can be dispatched by the NCA for local disasters, internal unrest, or to supplement capabilities of tactical units (MR and below) during wartime crisis.³⁶⁸

Communications R & D Institutes. Clearly, the CD will have its own R & D institutes. At least one, the Information Engineering Academy, has been identified.³⁶⁹

Military Affairs Bureau. This bureau was listed in the 1996 and 1997 editions of the *DPMP*, but no other information on its existence was found by this student.

Corporations. As mentioned previously, at a minimum, CESEC likely remains as a Communications Department entity.

Logistics Training Group. Identified in *Jiefangjun Bao*.³⁷⁰

Engineer Unit. Identified in *Jiefangjun Bao*.³⁷¹

³⁶⁷ *Jiefangjun Bao*, 17 February 1988.

³⁶⁸ These roles and missions would be somewhat analogous to author's own experiences in the 11th Signal Brigade.

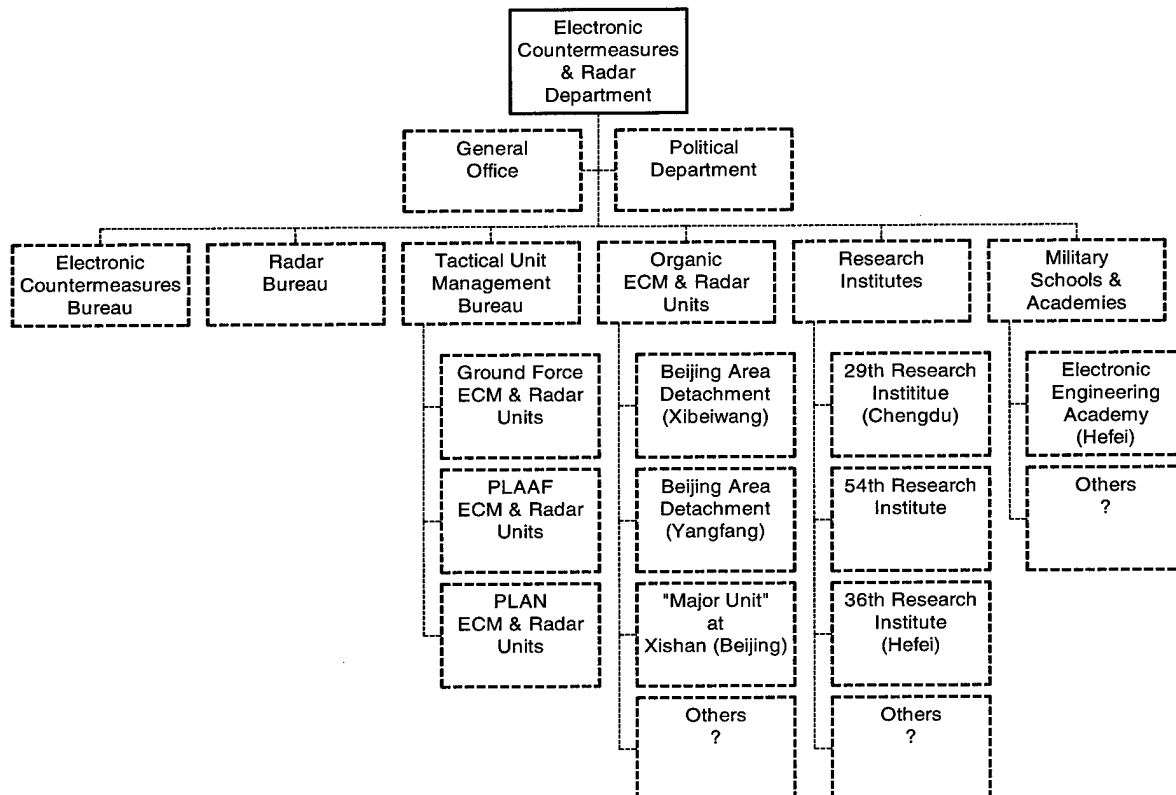
³⁶⁹ According to Mark Stokes, the "Information Engineering Academy" is subordinate to the "GSD Telecommunications Department." See Stokes, p. 45.

³⁷⁰ *Jiefangjun bao*, 13 September 1988.

³⁷¹ *Jiefangjun bao*, 17 February 1992.

Fourth Department/Electronic Countermeasures & Radar Department (*Dianzi Duikang Yu Leida Bu*)

Figure 4.7 GSD Electronic Countermeasures & Radar Department



Data on the organization of this GSD department was difficult to come by; almost nil. The *DPMP* series does not list it at all. We do, however, have some idea about its focus and missions. Mark Stokes discusses it in his monograph and Ball also touches on it in his article on PLA signals intelligence, although neither have great detail. As Stokes comments, "there is still a gap in knowledge" about it.³⁷²

Hasten to add there is also some confusion and disagreement among specialists as to whether or not this department is numbered as the "Fourth Department." Ball and Stokes assert that the Electronic Countermeasures & Radar Department (hereafter, ECM

³⁷² Stokes, p. 72, footnote 100.

& RD) is known internally as the "Fourth Department."³⁷³ SEROLD's *DPMP* series all carry the Communications Department (*Tongxin Bu*, Signal Corps) as the "Fourth Department."³⁷⁴

The confusion may be a result, in part, of the hazy operational line that separates Information Warfare (IW) from electronic intelligence (ELINT) as disciplines, and the responsibilities for each carried out by the Communications Department and the ECM & RD may overlap. Of interest, Mark Stokes cites a 1997 PLA NDU Press article authored by Major General Zhang Youcai that discusses theater-level electronic countermeasures. Given the substance of the article (i.e., a discussion of ECM) Stokes speculated that Zhang is "likely director or deputy director" of the ECM & RD (which he refers to as the Fourth Department).³⁷⁵ However, in the 1999 *DPMP*, the Communications Department (which the *DPMP* refers to as the Fourth Department) carries Zhang Youcai as director of the *Tongxin Bu* (Communications Department-Fourth Department).³⁷⁶

Subsequent discussions with knowledgeable individuals during the course of the research for this study indicate that the ECM & RD is indeed numbered as the Fourth Department. The previous discrepancies may have also been a function of the fact that prior to the establishment of the ECM & RD it was the Communications Department that was numbered as the Fourth Department.

Both Ball and Stokes agree that the ECM & RD has the PLA's tactical ELINT portfolio, and that it serves as an important adjunct to the strategic-level SIGINT functions performed by the Third Department. The key point to remember about the ECM & RD is that its focus is at the operational and tactical levels of warfare.

According to Ball, "In 1990 a 4th Department was established at the same level as the 2nd and 3rd Departments and this reflected the upgrading of China's tactical SIGINT and EW capabilities over recent years." Ball further asserts that prior to the establishment of the ECM & RD electronic warfare was a Second Department responsibility.³⁷⁷ Stokes offers the following:

The GSD Electronic Countermeasures and Radar Department (also known as the GSD Fourth Department), established in 1990, has overall responsibility for electronic warfare, including electronic intelligence collection and maintenance of threat libraries and electronic orders of battle. Besides coordinating PLA electronic warfare doctrine and strategy, GSD Fourth Department units provide electronic warfare defense of

³⁷³ Ball, *ibid.* p. 367, Stokes, *Ibid.* p. 34, and conversations with Stokes, May 2000.

³⁷⁴ Conversations with Mulvenon, May 2000; correspondence with Melvin, May 2000.

³⁷⁵ Stokes, p. 73, footnote 101.

³⁷⁶ *DPMP* (1999), p. 17,

³⁷⁷ Ball, p. 367.

strategic targets, such as the PLA command bunkers in the Western Hills (Xishan) of Beijing.³⁷⁸

In addition to providing ECM to defend key national assets, the ECM & RD, according to Ball, has oversight of all PLA EW units down to the division level. Moreover, Ball tells us that this GSD sub-department "...also manages and directs SIGINT and EW operations for the PLAN and PLAAF."³⁷⁹ Ball, posits the same relationship between the ECM & RD and tactical units down in the Military Regions (MRs) that he described for the Third Department and its respective units down in the MRs. Can this be verified? Not at this point; but the concept should not be discounted altogether. Where one does raise some question about the parallel relationship is in one major difference: strategic or operational-level SIGINT sites are clearly national-level assets, hence likely managed directly by the Third Department of GSD. ECM units, especially in the ground forces, might be more in line with traditional maneuver units organic to divisions, therefore local commanders likely have some degree of control over them. At the same time, it is not difficult to envision the ECM & RD directing the missions of PLA Navy and PLA Air Force EW collection assets (airborne collectors and specially equipped naval vessels) to support national-level requirements.

Ball's discussion of the ECM & RD tends to focus on units and detachments, which is not surprising given *Jane's* usual emphasis on order of battle and hardware issues. What is left out in his discussion (although we take nothing away from what Ball has written), and must be remembered, is that all major GSD sub-organizations have as a primary responsibilities the oversight of programs at the national level, the development of policies, and providing connectivity between the center and the MRs. Consequently, if one were interested in PLA thinking about IW and EW, or PLA programs for either, one should turn one's attention to the ECM & RD of the GSD as well as the Communications Department.

The actual organization of the ECM & RD is unknown at this point. All we can do is posit a notional organization (see chart above). As usual, we posit the hypothetical existence of a General Office and a Political Department. Moreover, we shall hypothesize within the ECM & RD bureaus that provide national level guidance for the ground forces, PLAAF, and PLAN that are *not* organic to the ECM & RD; ECM and radar units that *are* organic to the ECM & RD;³⁸⁰ as well as research institutes associated with the department.

As far as research institutes are concerned, Stokes identifies three:

³⁷⁸ Stokes, p. 52.

³⁷⁹ Ball, p. 367.

³⁸⁰ Ibid., Ball, asserts that organic ECM & Radar units include detachments at Xibeiwang and Yangfang in the Beijing area as well as a "major unit" at Xishan.

- the Southwest Institute of Electronic Equipment (SWIEE)---also known as the 29th Research Institute in Chengdu. This institute is responsible for radar jammers.
- The GSD 54th Research Institute, which he asserts "supports the ECM department in development of digital ELINT signal processors to analyze parameters of radar pulses." And
- The 36th Research Institute in Hefei, which develops communications jammers.³⁸¹

In addition to research institutes, the ECM & RD likely has its own associated schools and academies. Stokes believes one is the PLA Academy of Electronic Engineering in Hefei (Anhui Province)³⁸², but this was prior to the consolidation of military academies and schools in 1999-2000, so we cannot be sure of its status at this point.

Also of note, organizationally, both Stokes and Ball focus on the "ECM" aspect of this department---the mandate of which is clearly meant to defeat enemy systems. However, the name of the "ECM & RD" suggests there is also a "radar" half of the house which may in fact not be concerned with defeating enemy systems but developing the PLA's own radars and training its own "radar troops." Therefore, and purely speculative on the part of this student, we should hypothesize that the ECM & RD has two major organizations, bureaus perhaps; a notional ECM Bureau and notional Radar Bureau. For example, a notional "Radar Bureau" would likely have been responsible for developing the 1996 "General Radar Equipment Technical Service Regulations."³⁸³

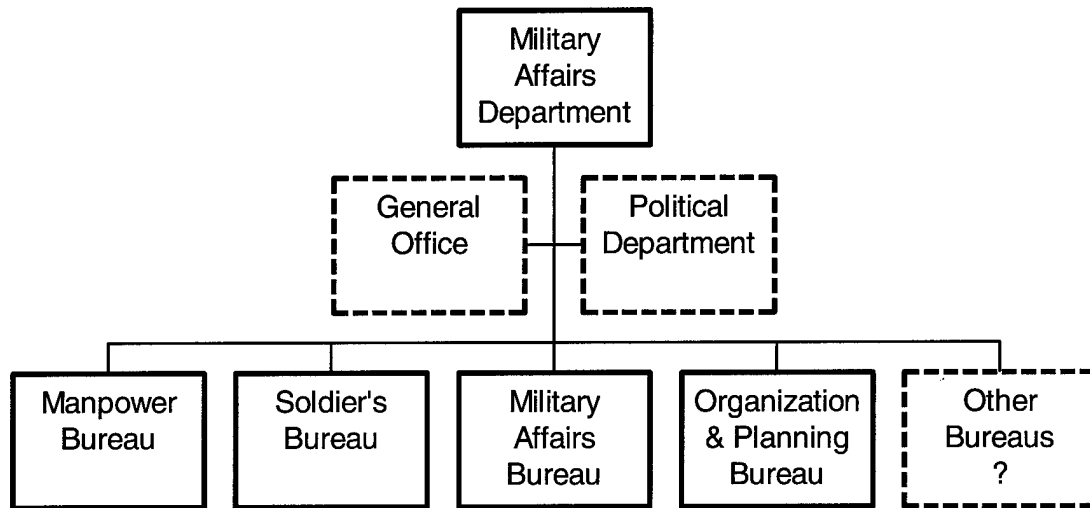
³⁸¹ Stokes, pp. 34, 53.

³⁸² Stoke, p. 53.

³⁸³ See Zhang Panhua and Zhang Dongwen, "General Radar Equipment Technical Service Regulations promulgated," *Jiefangjun bao*, 6 April 1996, in FBIS.

Military Affairs Department (*Junwu Bu*)

Figure 4.8 GSD Military Affairs Department



The GSD's Military Affairs Department (MAD) is concerned with the administrative and management processes, procedures, and "systems" by which the PLA is run. It appears to take CMC guidance on the issues of administration and management and:

- Develop specific policies ("rules, regulations and ordinances," as the PLA refer to them),
- Issue guidance to the PLA for their execution, and
- Conduct surveys or inspections to gauge enforcement.

This department, which deals with the entire PLA, seems to have responsibilities that would be found in the office of the U.S. Army's Adjutant General (developing regulations and policies), the office of the Inspector General (inspecting for compliance or adjudicating questions), the U.S. Army Personnel Command (for developing policies on career tracks), as well as U.S. Army TRADOC (for the promulgation of Field Manuals). Whenever there are new regulations that govern non-combat affairs or non-political (non-Party) personnel issues, spokesmen from the Military Affairs Department are often interviewed in the PLA press to explain them to the rest of the Chinese military establishment.

From what little can be gleaned from the Chinese press, the Military Affairs Department has an extremely broad mandate. It is clear that in carrying out its responsibilities the MAD has to engage in vertical coordination (down to the MRs and services and up to the CMC) as well as horizontal coordination (with other GSD

organizations such as the Legal Advisory Office, the GPD especially, and likely the GLD and GAD) throughout the PLA.

For example, it seems that the Military Affairs Department will take the CMC's guidance on an issue, develop and issue broad "regulations and ordinances" and then oversee the work of the Military Regions in adapting the "central" regulations to local conditions to ensure that the spirit and specific intent of the centrally-issued "regs" are carried out.³⁸⁴

Over the past few years the PLA has placed tremendous emphasis on the "regularization" and "standardization" of administrative and management practices. The Military Affairs Department has likely been on the cutting edge of the CMC's reform agenda in most non-combat related reforms and some "warfighting" reforms.³⁸⁵

The Military Affairs Department has likely been responsible for working out the details of the following recent PLA organizational reform initiatives, some of which are revisions to standing policies and some of which are first-time policies:

- The PLA "Garrison Regulations,"³⁸⁶
- The "Routine Service Regulations,"³⁸⁷
- The PLA "Discipline Regulations,"³⁸⁸
- The PLA "Formation Regulations,"³⁸⁹ and
- The "Guidelines for the Construction of Chinese PLA Headquarters,"³⁹⁰ to name a few.

The "Soldier's Bureau" of the Military Affairs Department has apparently been deeply involved in the recent, total revamping of the PLA's Non-Commissioned Officer

³⁸⁴ Su Ruozhou, "Implementing 'Decision' of the Central Military Commission on Management and Education Work in New Year---Leader of Military Affairs Department of PLA General Staff Headquarters Answers Reporter's Questions," *Jiefangjun bao*, 17 January 2000, in FBIS.

³⁸⁵ The MAD apparently works with the PLA Academy of Military Sciences (*Junshi Kexue Yuan*) in identifying areas in need of revision or reform and working out details. See Zhang Dongwen and Ma Xiaochun, "Conscientiously Enforce headquarters Regulations, Step Up Headquarters Building in Accordance With the Law--Chief of Staff Fu Quanyou Answers Reporters' Questions on Studying, Implementing New-Generation Headquarters Regulations," *Jiefangjun Bao*, 13 November 1996, in FBIS.

³⁸⁶ Ibid.

³⁸⁷ Ibid.

³⁸⁸ Ibid.

³⁸⁹ Ibid.

³⁹⁰ "Editorial on Headquarters Building," *Jiefangjun bao*, 23 February 2000, in FBIS.

Corps System as promulgated in the July 1999 revision to the "Regulations on Military Service of Active Duty Soldiers."³⁹¹

Moreover, the MAD is also responsible for setting policies on how staff work itself is to be conducted and accomplished throughout the PLA. And by this we probably mean the use of forms, the flow of paperwork, and the unending minutia involved in moving a piece of paper (an "action" in U.S. staff officer parlance) through the universally laborious channels that any officer in any military bureaucracy has experienced.

In addition, to the degree that the MAD was involved in the promulgation of the February 2000 "Guidelines for Construction of Chinese PLA Headquarters" the MAD *may* also touch on some war fighting issues; at least from an administrative angle. The "Guidelines" seemed aimed at: (1) standardizing the roles and missions of military staffs at all levels, tactical as well as administrative; (2) rationalizing command relationships; and (3) outlining leadership responsibilities.³⁹² To the degree that the MAD promulgates such large documents (the "Guidelines" are said to consist of 8 chapters and 35 articles)³⁹³ it also is likely involved in drafting the PLA equivalent of U.S. "Joint Pubs" or U.S. Army Field Manuals (FMs).

Given the mandate that we suspect it has, the MAD was probably the GSD organization that was responsible for organizing and executing the November 1999 "All-Army Chiefs of Staff Conference" at which CoGS General Fu Quanyou discussed the new "demands" placed on headquarters and staffs throughout the PLA as it moves toward being capable of engaging in "Local Wars Under Modern High-tech Conditions."³⁹⁴

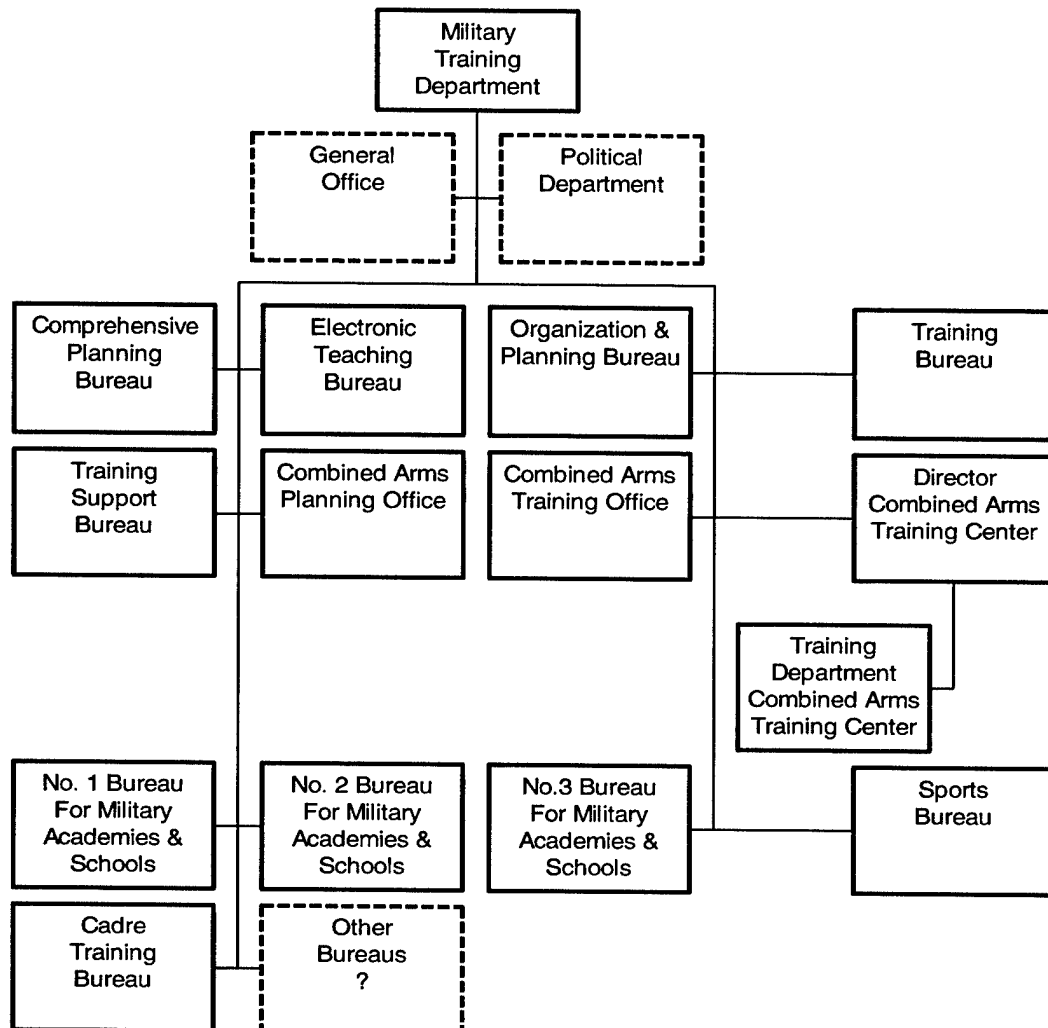
391 Xu Yang, "Jiang Zemin, Zhu Rongji Issue New Army Regulation," *China Daily*, 13 July 1999, in FBIS. This article interviews Leng Degui who is identified as "the Director of the Soldier's Bureau of the Army Affairs Department under the Headquarters of the General Staff." This article is the basis of the identification of the "Soldier's Bureau." The other bureaus identified come from the *DPMP* (1993).

392 See "Editorial on Headquarters Building." See also Ma Xiaochun, "Jiang Zemin Signs Order for Building PLA Headquarters," *Xinhua*, 23 February 2000, in FBIS. "We must strengthen organizational construction and center on strengthening joint combat functions and overall command efficiency, optimize organizational structure, and improve high-efficiency operating mechanisms. We must strengthen building tasks as well as raise our planning and guidance for military building and capability in organizing and commanding high-tech local wars. We must strengthen work style and discipline, and train the army to adopt a swift, accurate, tight, meticulous, and pragmatic work style so as to truly, firmly, and speedily implement the decisions of party committees and leaders and directives of superiors. We must strengthen the modernization of command methods and ensure highly-efficient and stable command control over the troops. The 'Program' goes into effect from the date of its promulgation."

393 Ma, "Jiang Zemin Signs Order."

394 Ma Xiaochun, "Fu Quanyou Addresses Command Staff Meeting," *Xinhua*, 10 November 1999, in FBIS.

Figure 4.9 GSD Military Training Department



Military Training Department (*Junxun Bu*)³⁹⁵

The Military Training Department (MTD) of the PLA is executive agent of the Central Military Commission and the Chief of the General Staff for all aspects of military training throughout the entire PLA. At a minimum, it is responsible for:

- providing guidance to the PLA for training,
- establishing standards for training,
- evaluating the state of training,
- developing new training methods, and
- managing the PLA's training budget.

³⁹⁵ The basis of this organization chart is as follows:

Comprehensive Planning Bureau: Listed in various editions of *DPMP* (1988-1999)

Electronic Teaching Bureau: *DPMP* (1997)

Organization & Planning Bureau: *PDMP* (1988, 1990, 1991, 1996)

Training Support Bureau: *DPMP* (1988, 1990, 1991, 1996); also identified in Zhai Xianfeng, Ren Janjun, and Zhang Zhanhui, "Watching the Tide Through a Window-- Viewing the General Situation of Training Reform in 1996 from All-Army Exposition of Results in Research on Methods of Operation," *Jiefangjun Bao*, 8 February 1996 (FBIS).

Combined Arms Planning Bureau: *DPMP* (1988, 1990)

Combined Arms Training Bureau: *DPMP* (1988, 1991)

Training Bureau: *DPMP* (1997)

Director, Combined Arms Training Center: *DPMP* (1991)

Training Department, Combined Arms Training Center: *DPMP* (1991)

No. 1 Bureau for Military Academies & Schools: *DPMP* (1988, 1990, 1991, 1996). A "Military Academies Department" under the GSD Training Department is identified in Kuan Cha-chia, "Military Authorities Define Reform Plan; Military Academies To Be Reduced By 30 Percent," *Kuang Chiao Ching*, 16 March 1998 (FBIS).

No. 2 Bureau for Military Academies & Schools: *DPMP* (1988, 1990, 1991, 1996)

No. 3 Bureau for Military Academies & Schools: *DPMP* (1988, 1990, 1991, 1996)

Cadre Training Bureau: *DPMP* (1998). Also identified in Kuan Cha-chia, *ibid.*

Sports Bureau: *DPMP* (1988, 1991, 1996)

General Office: Notional on part of author.

Over the years, some of these sub-organizations may have been abolished, merged, or renamed. Some may have been upgraded from "offices" to "bureaus." I choose to list all I found in spite of potential redundancy in order to be able to get a better "feel" for what the Training Department does. I also choose to keep all at the "bureau" level unless there is firm evidence to the contrary.

Moreover, the MTD provides guidance to and oversight of the PLA's massive military academies system.

MTD guidance and policies affect all PLA entities: from the training of the staffs of the four General Departments, to the Training Departments of the Military Regions and the three Services (PLAAF, PLAN, Second Artillery) and their subordinate units, large and small unit training (exercises), individual training, and technical training.

Most important, however, to the MTD has fallen the weighty responsibility of leading the PLA through a paradigm shift in training (i.e., guiding training reform) in order to translate the PLA's changing operational concepts from theoretical operational requirements into operational capabilities via the medium of training.³⁹⁶ Reforming PLA training to comport with evolving operational concepts has been the central focus of the MTD since the mid-1990s when the PLA shifted its war-fighting emphasis to "Local Wars Under Modern High-tech Conditions."

Because training is so central to the PLA in peacetime, there is no dearth of Chinese press reporting on this aspect of military activity. Consequently, while we cannot state with certainty the specific responsibilities of each of the bureaus of the MTD, we can list specific MTD activities and responsibilities. In some cases we can speculate about where in the above organizational chart these activities may take place.

Annual, General Training Guidance to the PLA. Each year, the MTD develops training guidance for the PLA that it issues under the authority of the General Staff Department. This document outlines, in very broad terms, areas of training that the PLA will focus upon for the next training year. In Chinese, the term for the document is *Junshi Xunlian Dagang*, which Blasko, Klapakis, and Corbett choose to translate as "General Training Program."³⁹⁷ This guidance is usually heralded in the PLA press following the annual "All-Army Training Work Conference" (usually held in January or February each year before Spring Festival, or *Chunjie*). This conference is likely organized and executed by the MTD.³⁹⁸

³⁹⁶ Without question, the best informed overview of the process of training reform that the PLA has been undergoing since the Gulf War is Dennis J. Blasko, Philip T. Klapakis and John F. Corbett, Jr., "Training Tomorrow's PLA: A Mixed Bag of Tricks," in David Shambaugh and Richard H. Yang, eds., *China's Military In Transition*, Oxford: Clarendon Press, 1997. Cited hereafter as Blasko. This particular article provides the background of the massive shift in training methods that the PLA has been undergoing since the early 1990s, provides studied and informed assessments of progress and problems, and provides an appendix listing major PLA training exercises from 1990 through 1995. Clearly, there have been more changes since then, but this particular article is an invaluable source for understanding the magnitude of the changes going on in PLA training.

³⁹⁷ Blasko, p. 226.

³⁹⁸ See, Ren Yanjun, "General Staff Department Stresses Need to Grasp Deepening Reform on One Hand, and Grasp Popularization of Results on Another in

As an example, the following is a synopsis of portions of the general training guidance contained in the directive for 1997:

1. Devote more energy to improving the quality of training,
2. Standardize training content,
3. "Regularize" training sequence,
4. Economize training support,
5. Strengthen the use of training simulation,
6. "Step up" training base construction,
7. Increase training standards,
8. Increase use of science and technology in training.³⁹⁹

Annual, Specific Training Tasks for the PLA. The MTD also annually issues very specific training guidance to the Military Regions and the Services. For example, in 1995 the following directives were issued:

1. Beijing Military Region will train a number of squads to battalion sized units as opposing forces. Infantry divisions and regiments will deploy to unfamiliar terrain to carry out tactical training starting with company-level subjects. Armored, artillery, and anti-aircraft units will stay in the field until they complete their training missions.
2. The Air Force will intensify opposing forces attack training. Every aviation division will pick the best pilots and most advanced aircraft to form a blue force flight.
3. The Second Artillery will develop new methods for operations under high-technology conditions and emphasize mobility, night and counter-strike operational exercises. Intensified efforts will be used to train guided missile brigades in the combined operations of their launch battalions.⁴⁰⁰

Making Arrangements for All-Army Training Work in the New Year," *Jiefangjun bao*, 10 January 1996, in FBIS; Ren Yanjun, "General Staff Department Outlines Military Training Tasks for 1997, Calling for Popularizing, Deepening Reform Achievements, Improving Training Quality," *Jiefangjun Bao*, 3 February 1997 (FBIS); and Ren Yanjun, "General Staff Headquarters on Training Reform," *Jiefangjun bao*, 17 January 1998, in FBIS.

399 Ren Yanjun, "General Staff Department Outlines Military Training Tasks for 1997.

400 The above extracted verbatim from Blasko, pp. 232-233. The authors list specific tasks for each of the Military Regions and Services.

Circulars, Directives, and Regulations. The MTD, on an ad-hoc basis, issues training guidance to the entire PLA under the authority of the CMC or the General Staff Department. Training "Circulars" apparently discuss the top leadership's views and philosophies on military training and are meant to be distributed down to the lowest levels. They appear to supplement and reinforce the views of the PLA high command as articulated at the "All-Army Training Work Conferences" or are issued as a result of MTD inspections on the state of training. For example, in 1997 the GSD, "with the approval of the Central Military Commission," issued a circular entitled "Report on the Situation of Conducting Training on Popularizing and Using High-tech Knowledge to Enhance Training Reform Achievements in the Whole Army." The purpose of the circular was to reinforce the point that CMC Chairman Jiang Zemin had directed the army to use science and technology to enhance all aspects of army building and that training is no exception.⁴⁰¹

"Directives" may be more specific in that they "task" major units to accomplish specific training activities.⁴⁰² They are likely issued under the authority of the GSD or MTD, as opposed to "Circulars" which seem to carry the imprimatur of the CMC.

Finally, the MTD is likely the source of regulations that govern the military training of the PLA. One theme found throughout this paper is the recent emphasis in the PLA on the promulgation of regulations to standardize various aspects of military activities. Training is no different. For example, in 1997 the "GSD" issued the "Interim Military Training Grading and Appraisal Regulations."⁴⁰³ Also, the MTD likely had a hand in the drafting of the regulations on militia training (see section on Mobilization Department below). But of major consequence, one might speculate that the MTD had some supporting role (if not major role) in the drafting of the "PLA Combat Regulations" (author's shorthand) issued in February 1999. These comprise a series of thirteen "regulations" covering all aspects of PLA combat operations, for all services, and at all levels of war; strategic, operational, and tactical. Besides being a guide to PLA

⁴⁰¹ Ma Xiaochun, "CMC Circular on Using High Tech in Military Training," *Xinhua*, 19 November 1998 (FBIS). This article appeared only one month after the circular was distributed. See also, Zhang Jian and Ren Yanjun, "General Staff Department Circular Requires All Army To Conscientiously Implement New Generation Military Training Program," *Jiefangjun Bao*, 22 December 1995 (FBIS).

⁴⁰² Zhang Yongguo and Ren Yanjun, "Units of Entire Army Are Conducting Training in Modern Combat Skills in a Hardworking and Thrifty Way," *Jiefangjun Bao*, 28 May 1995 (FBIS).

⁴⁰³ Ren Yanjun, "General Staff Department Outlines Military Training Tasks for 1997," *ibid.*

warfighting doctrine for "Local Wars Under Modern High-tech Conditions" these regulations are also being touted as the central focus of future PLA training.⁴⁰⁴

Conducting Inspection Tours of the State of PLA Training. Apparently, like many GSD officers from other departments and bureaus, staff officers from the MTD engage in frequent travel throughout China. In the case of MTD officers it is to observe training, check for compliance with circulars, directives, and regulations, and in many cases offer assistance. Usually, positive inspection findings are publicized via *Jiefangjun Bao*. For example, in October 1995 an article entitled "Optimistic Trend in All-Army Military Training" began with this statement:

Since early August, departments concerned under the General Staff Headquarters have carried out month-long on-site inspection of military training conducted by ground, naval, and air units and Second Artillery units as well. The inspection teams have just returned after inspecting the units concerned; carried out discussions on and analysis of the situation and quality of the whole army's basic training, cadre training, and command organ training; and concluded that the whole army's training has developed an optimistic trend.

But shortcomings are also addressed head-on. Deeper into the same article above it was bluntly stated that a certain division was incapable of continuing its offensive in an exercise as soon as "blue units" started to use electronic jamming.⁴⁰⁵ Moreover, in an even franker assessment that was apparently based upon a training inspection tour in 1995, the Nanjing Military Region was "admonished not to evade contradictions or exaggerate results in experimental training demonstration system. Their work will be the basis for revising and perfecting the GTP (General Training Plan)."⁴⁰⁶

404 Ren Xiangdong, "PLA Ground, Naval, and Air Units Implement New-Generation Combat Regulations," *Liaowang*, No.23, 7 June 1999 (FBIS) and "Interview With Chief of the General Staff Fu Quanyou by staff reporter: 'Earnestly Implement Operations Decrees and Continue To Enhance Capacity to Win Wars'," *Jiefangjun Bao*, 25 February 1999 (FBIS). Fu specifically links the operations decrees to the training of the PLA in order to achieve the "Two Transformations" in army-building.

405 Chen Youyuan and Su Ruozhou, "Optimistic Trend in All-Army Military Training," *Jiefangjun bao*, 8 October 1995, in FBIS. These negative comments about PLA training are in no way meant to convey the impression of an incapable PLA. To the contrary, as a former professional soldier, I view these types of frank criticisms as a testimony to the ever-increasing professionalism of the PLA and the fact that sooner or later they are going to prove quite capable of enhancing their capabilities relative to the past.

406 See Blasko. The authors cite an article 8 February 1995 in *Jiefangjun bao*, entitled "General Staff Department Outlines 1995 Military Training Tasks," translated by SEROLD Associates, Hong Kong.

Identification and Development of Modern Training Devices. As part of its mandate to modernize PLA training, the MTD appears to be the lead GSD organization for identifying and developing modern "high-technology" training equipment and devices. At least one article in *Jiefangjun Bao* implies that the Training Support Bureau of the MTD is involved in automation and simulation support for PLA training.⁴⁰⁷ Moreover, the MTD appears to work closely with PLA research institutes, academies, and likely commercial Chinese firms to develop modern training equipment. In recent years the development and utilization of automated training simulation packages for FTXs and CPXs has been high on the list of the MTD.⁴⁰⁸ It is not known if the MTD has its own associated R & D institutes.

Conducting Training Experiments for New Operational Concepts. The PLA process for developing new operational concepts at the campaign and tactical levels of war (i.e., joint and combined operations, large and small unit tactics, etc.) appears to follow a three stage cycle: (1) theoretical research, (2) experimentation and refinement, and, finally, (3) standardization throughout the PLA. The MTD has a major role in the process. The role of the MTD is to work with the Academy of Military Sciences (*Junshi Kexue Yuan*) to translate the AMS's theoretical doctrines into "on the ground" experiments to test and refine those concepts. Consequently, the MTD can apparently "task" a Military Region to provide the units for operational "experiments." It may also

⁴⁰⁷ Zhao Xianfeng, Ren Janjun, and Zhang Zhanhui, "Watching the Tide Through a Window--Viewing the General Situation of Training Reform in 1996 from All-Army Exposition of Results in Research on Methods of Operation," *Jiefangjun Bao*, 8 February 1996, in (FBIS). "Senior Colonel Gao Xianying, director of training support of the Military Training Department under the General Staff Department, believes that a new mass drive to develop combat simulation systems and equipment will emerge in 1996 in response to the objective needs for deepening the research on methods of operations."

⁴⁰⁸ See Gao Xianying and Su Ruozhou, "Important task for Army Modernization," *Jiefangjun bao*, 28 November 1996. According to this article, in 1996 the GSD organized an exhibition to display advances recently made in developing "high tech" training devices. The article asserts that "last February, the General Staff Headquarters Military Training Department organized 15 military units, military academies, and scientific research institutes under the army, navy, and air force to jointly tackle key problems, taking aim at the present world's new technology. They used a distributed interactive simulation technique to simulate operations of all arms and services and combine them into an organic whole, showing on the screen: the situation of the combined tri-service operations; local conflicts; the movements of various units; shootings; and activities involving logistics support....a simple, economical, an effective instrument for the middle rank and senior commanders and staff officers of the three forces to regularly practice combined operations."

be that the MTD works with the AMS and the MR units in question to devise, conduct, and evaluate the operational experiments, although this is less certain.⁴⁰⁹

MTD Relationship With The Military Regions. The relationship between the GSD's MTD and the Training Departments on the staffs of the seven military regions (MRs) can be described as one of "guidance from above and execution below, and inspection from above and compliance below" (author's phrase). We have already mentioned the fact that the MTD issues both general and specific training guidance to the military regions with which the latter must comply and which MTD officers inspect on a regular basis. However, the linkage between the MTD and its counterparts in the MRs may very much closer.⁴¹⁰ For example, some knowledgeable individuals assert that the MTD must approve the annual training plans promulgated by the Training Departments of the MRs. Moreover, whereas the MR Training Departments can develop and conduct their own training programs up to the division level, only the MTD of the GSD can authorize and approve exercises that involve Group Armies.⁴¹¹ If this is in fact the case, then what this implies is that the commanders of military regions do not necessarily have total authority over the training of their own units. But the MTD can also be a helpful entity for the MRs. For example, it has been asserted that if an MR Training Department needs additional funds for the execution of its training programs it can request additional funding support from the MTD.⁴¹² Additionally, Blasko, Klapakis, and Corbett mention that in 1995 the services and some MRs established "mobile training teams" to assist

409 For more on the PLA and training experiments see Blasko. See also Gao Xianying and Su Ruozhou, *ibid.*, and Zhang Xianfeng, Ren Janjun, and Zhang Zhanhui, *ibid.* the latter refer to the experimentation process as "theoretical research-actual drills-further improvement of fruits of research." They also infer that the AMS's "Campaign and Tactics Department" works with the MTD on operational experiments. The *DPMP* (1999) lists the AMS as having an "Operations and Tactics Department."

410 In 1995 the "new generation of GTPs" system for the PLA was first being worked out (see Blasko, et al, p. 226) and the GSD/MTD-MT/TD relationship was likely evolving. At that time an article written by "the training department of the Beijing Military Region" offered its own views on what the relationship should be.

"The headquarters of the general staff should set different training topics for different units in light of their special combat missions, forming a general training outline. Using the general training outline as a guide and taking into account its own circumstances and the combat mission it may be asked to take up, each war zone, along with the navy and air force and the second artillery division, should then work out its own training sub-outline. In the main, the group army and the units underneath it should train its forces and meet quality specifications by following the topics in the training sub-outline and complying with the training requirements set by higher authorities."

See "Urgent Need To Deepen Military Training Reform," (Ascribed to the Beijing Military Region Training Department), *Jiefangjun bao*, 19 September 1995, in (FBIS).

411 Comments by knowledgeable individuals, 2000.

412 *Ibid.*

units in assimilating new equipment, understanding new operational concepts, and adjusting training accordingly.⁴¹³ One can speculate that the MTD is at the root of such an initiative and likely has its own mobile training teams being dispatched throughout the PLA. Finally, the MTD sponsors and hosts "training symposia" (author's term) to which the Training Departments of the MRs can send representative to learn about the latest developments in training, or, symposia in which the MTD sends teams out to the MRs to pass along successful training techniques or activities in other MRs.⁴¹⁴

Studying How Foreign Armies Train. As part of its mandate to reform PLA training, the MTD often sends delegations abroad to learn about foreign military training and military academy management.⁴¹⁵

Oversight of PLA Training Bases. Over the past few years the PLA has moved to larger and more complex field training exercises that encompass combined arms training, joint-like exercises, the use of high-tech systems, as well as the utilization of opposing forces (OPFOR) units ("Blue Forces" in PLA parlance). Consequently, there has been a greater need for training bases and facilities that can accommodate them. The MTD clearly has a role in insuring that the PLA has the training grounds and facilities it needs to train for "Local Wars Under Modern High-tech Conditions." Indeed, given the fact that the *DPMP* lists a bureau under the MTD for a "Combined Arms Training Center" it is highly likely that the MTD oversees a national-level training center, similar to the U.S.'s National Training Center (NTC) at Fort Irwin, California, at which large scale, large unit training can occur under the most sophisticated and controlled conditions, where operational concepts can be tested and refined, and through which PLA units can be cycled for readiness testing. Clearly, the MTD also provides oversight of and guidance to the training bases and facilities that are established and maintained by the MRs. In February 2000, Chief of the General Staff General Fu Quanyou authored a long essay in *Junshi Kexue* (*Military Science*, the journal of the PLA Academy of Military Science) devoted to training issues. Among the many issues he addressed, General Fu emphasized the need for the building of more modern training bases to support joint training. He stated that new training bases must provide for the "five major systems"---"systems for directing and dispatching, and monitoring; for simulating battlefield situations; for

⁴¹³ Blasko, et. al, p. 229.

⁴¹⁴ See Ma Xiaochun, "CMC Circular on Using High Tech in Military Training," *Xinhua*, 19 November 1998, in (FBIS).

⁴¹⁵ See "Urgent Need To Deepen Military Training Reform," *ibid*. For the PLA's utilization of foreign military relations to enhance all aspects of its military modernization see David M. Finkelstein, "Engaging DoD: Chinese Perspectives on Military Relations with the U.S," Alexandria, VA.: The CNA Corporation, CRM 99-0046.90, October 1999; and Kenneth W. Allen and Eric A. McVadon, "China's Foreign Military Relations," Washington DC: The Henry L. Stimson Center, October 1999. These two monographs are likely the best to be found on PLA foreign military relations.

supporting evaluations; for providing comprehensive logistics support; and for base management."⁴¹⁶ Insuring that this vision is executed will fall to the MTD.

Reform of PLA Military Academy System. Like all armies around the world, the PLA realizes that its military academies and training schools are the key to its future reforms. In the U.S. this is referred to as the Professional Military Education or PME "system." Since 1999 the MTD has undoubtedly been involved in overseeing the implementation of an ambitious reform of the PLA's PME system. Realize that the PLA's PME system is massive. The PLA PME system is rather decentralized with each of the seven MRs sponsoring its own schools and academies. Prior to 1999 (when the latest reforms began to be implemented) the PLA reportedly had more than 100 separate major military schools and academies.⁴¹⁷ Many were redundant, the curricula were antiquated, and most were not necessarily using the most modern teaching or training techniques. Moreover, given that Jiang Zemin announced another 500,000-man reduction of the PLA at the 15th Party Congress in September 1997 (which the PLA asserts was accomplished by 1999), it was clear that the PME system was a lucrative target for cutbacks. This was because of the incredible number of personnel that have been involved in the PME system at any one time. Knowledgeable individuals place the pre-1999 figure at 400,000 personnel: 200,000 students, 100,000 faculty members, and another 100,000 support personnel to make the system run.⁴¹⁸ Consequently, since 1999 there has been a program in place to abolish many academies, merge others, create new ones that deal with "high-tech" issues, and retire, demobilize, or transfer unneeded support personnel and faculty. The reform touts a four-point slogan: "(1) reduce numbers; (2) optimize structure; (3) rationalize relationships; and (4) improve effectiveness."⁴¹⁹ It will fall to the bureaus under the MTD that oversee military academies to track progress and insure compliance.

Sports Events. On a final note, the MTD apparently has a role in the organization and execution of military sports events, both within the PLA and in the field of international military sports competitions.⁴²⁰ In carrying out this role it likely works with the General Political Department.

416 General Fu Quanyou, "Push Forward Military Training by Innovative Scientific and Technological Means," *Junshi Kexue*, No. 1, February 2000, in FBIS. This important article is an excellent guide to current PLA training philosophies, priorities, and difficulties.

417 For an excellent account of the history of reforms of the PLA PME, system see Kuan Cha-chia, "Military Authorities Define Reform Plan, Military Academies To be Reduced By 30 Percent," *Kuang chiao ching*, No. 306, 16 March 1998, in FBIS.

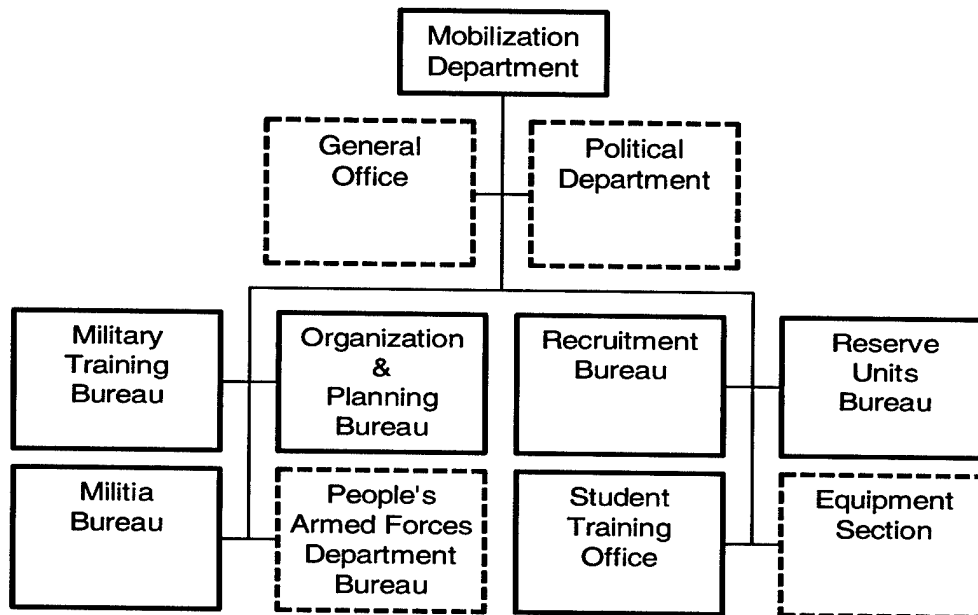
418 Comments by knowledgeable individuals, late 1998.

419 See *Jiefangjun bao* "Commentator's Article," entitled, "Unify Our Ideas and Actions With Central Commission's Policy Decisions," 21 June 1999, in FBIS. This article reviews the 1999 military academy reform decisions, explains the rationale, and urges compliance.

420 See Shu Wen, Dan Lei, and Ma Xiaochun, "The 46th Military Pentathlon World Championships End in Beijing," *Xinhua*, 16 September 1998. This article lists a

Mobilization Department (*Dongyuan Bu*)

Figure 4.10 GSD Mobilization Department



As stated in the PRC "White Paper," *China's National Defense*, the Chinese armed forces are comprised of four major organizations: (1) the active-duty PLA; (2) the PLA reserves; (3) the People's Armed Police (PAP); and (4) the militia.⁴²¹ The Mobilization Department of the GSD is responsible for oversight of various aspects of two of the four components: the PLA reserves and the militia. Moreover, the Mobilization Department also has some oversight responsibilities for conscription.⁴²² These, then, are the three

Deputy Director of the GSD Training Department as a member of the game's organizing committee. Clearly, this is the role of the Sports Bureau of the MTD.

⁴²¹ *China's National Defense*, Beijing: Information Office of the State Council of the People's Republic of China, July 1998, p. 16. Hereafter, *China's National Defense*.

⁴²² The basis of the MD organization chart is as follows:

Military Training Bureau: Identified in *DPMP* (1999)

Organization & Planning Bureau: Identified in *DPMP* (1999). Also identified in FBIS, "Ningxia Holds Militia, Reserve Work Conference," Ningxia Ribao, 22 September

key areas of Mobilization Department work: militia affairs, reserve affairs, and recruitment.

Given the constant revisions to the PLA reserve system in the last fifteen years, the massive scale of the militia system, and the fact that its work must be accomplished in peacetime, the Mobilization Department (hereafter MD) is likely as busy as any organization within the GSD.⁴²³ Moreover, the intensity of MD work has probably picked up in the last couple of years in as much as the 500,000-man reduction in the "active" PLA announced by Jiang Zemin at the 15th Party Congress involves, in part, the wholesale transfer of units to the reserves as well as the transfer of individual officers and NCOs to the reserves.⁴²⁴ Overall, then, the MD is a relatively high-profile GSD organization.

Directing the work of the MD probably also requires keen political awareness. Militia work and conscription affairs are clearly "rice and *mantou*" issues. They are issues that hit home at the local level because they have an impact on local people and local resources. Militia work and conscription are also issues that cut across every conceivable Chinese bureaucratic organizational line: civilian and military, national government and local government, state and party.

1996. This article identified Wang Cubin as "director of the organization and planning bureau of the mobilization department of the General Staff Department."

Recruitment Bureau: Identified in *DPMP* (1999)

Reserve Units Bureau: Identified in *DPMP* (1999). Some editions of the *DPMD* list this as the "Reserve Service Bureau."

Militia Bureau: Xie Fenfen, "Zhejiang Militia Reserve Units Stage Science, Technology Military Drills," *Zhejiang Ribao*, 26 October 1999, in FBIS. This article identifies MG Li Suibin as the director of the "militia bureau under the General Staff Department's mobilization department."

Student Training Office: Listed in *DPMP* (1988-1998). Not listed in *DPMP* (1999).

People's Armed Forces Department Bureau: Strictly notional on the part of the author. It is highly likely that some sub-organization in the MD exists to coordinate with or oversee the conscription work and militia and reserve training responsibilities of the People's Armed Forces Departments. Such a sub-organization may be subsumed in one of the other identified bureaus.

Equipment Section: Very tentative. Based on a biography of General Wang Ruilin that mentions that he was a staff officer in the Equipment Section of the MD from 1966-1967. See "Xinhua Profiles CMC Member Wang Ruilin," *Xinhua*, 17 March 1998, in FBIS.

⁴²³ For an excellent (albeit brief) overview of the evolution of the militia and reserve systems since 1949, see Liu Hsiao-hua, "Jiang Zemin Convenes Enlarged Meeting of Central Military Commission, Policy of Fewer But Better Troops Aim at Strengthening Reserve Service Units," *Kuang Chiao Ching*, 16 May 1998, in FBIS.

⁴²⁴ Ibid.

Because its responsibilities are so broad the MD is clearly involved in a great deal of coordination. The Chinese press infers that the MD works closely with the Mass Work Department of the General Political Department (GPD/MWD) with which it shares responsibilities for different aspects of the militia and reserve systems.⁴²⁵ Besides probable coordination internal to the GSD (such as with the Training Department) the MD also likely deals with a host of other organizations:

- the CMC (guidance for mobilization, reserve, and militia work),
- some committees of the National People's Congress (mobilization, militia, and reserve legislation),
- the staffs of the Military Regions (to which reserve units are attached),
- and perhaps Provincial Governments (which share National Defense Mobilization Committee work---a provincial responsibility---with the MRs).

As far as one can determine, the MD probably carries out the following eleven types of specific activities or responsibilities with regard to militia work, the reserves, and conscription.

1. The MD is undoubtedly a key player in drafting, or coordinating on, the various national-level laws, regulations, and CMC directives that specifically guide, or touch on the militia, reserves, and conscription systems. Examples of such national-level dictats would include:

- "The Military Service Law" (1984 and revisions through 1999),
- "The Regulations on Militia Work" (1990),
- "The Law of the PRC on Reserve Officers," (1995),
- "The National Defense Law" (1997),
- "Certain Rules on Military Training of the Militia" (date unknown),
- "Outline of Militia Training Program" (date unknown),
- "Standards for Evaluating Results of Military Training of the Militia" (date unknown),⁴²⁶ and,

⁴²⁵ For example, see Zhao Yong and Liu Yushu, "General Staff Department, General Political Department Make Arrangements for Deepening Readjustment, Reform of Militia Work," *Jiefangjun Bao*, 26 October 1997 (FBIS); and Lu He, "Heilongjiang Holds Forum on Building Armed Forces," *Heilongjiang Ribao*, 1 September 1997 (FBIS).

⁴²⁶ This preceding list of laws and regulations come from Liu, *ibid.*, and "Lecture Two from the Nanjing Army Command Academy People's Armed Forces Department Teaching Research Office: 'Members of the Militia Must Undergo Military Training in Accordance With the Law'," *Zhongguo Minbing*, 9 February 1998 (FBIS), hereafter, "Lecture Two."

- "Regulations for Management of People's Militia Weaponry and Equipment" (Issued sometime after 1984).⁴²⁷
2. The MD likely coordinates on supplemental local laws and regulations on militia work, reserve work, and conscription that are developed and promulgated by the Mobilization Departments on the staffs of the Military Regions in conjunction with (and issued under the authority of) the local governments. Typical of such provincial and municipality-level ordinances are those currently in force in the Beijing Military Region:
 - "Regulations on Civil Militia Reserve Work" (issued by Beijing Municipal People's Congress, 1994)
 - "Shanxi Province Militia Reserve Work Regulations" (date unknown)
 - "Hebei Province Militia and Reserve Work Procedures" (date unknown)⁴²⁸
 3. The MD may have a role in validating the justification for the activation of new reserve units. According to *Kuang Chiao Ching*, since 1983, at least 50 reserve divisions have been created. These units currently provide the equivalent of "round-out" divisions for active duty PLA units in wartime. Moreover, press reports infer that the Military Regions and the Services (Navy, Air Force, and Second Artillery) are responsible for "creating" the reserve units they require.⁴²⁹ It would be highly unlikely if the MRs and Services were able to unilaterally decide on what types or how many reserve units they can create without reference to guidance contained in some centrally-managed reserve units program. Given the fact that the creation of reserve units has personnel implications (a GPD responsibility⁴³⁰), equipment requirements (GAD, GLD), and mobilization plan implications, it stands to reason that somewhere in the GSD is an office that validates the desires of the MRs and Services to create reserve units. Perhaps this responsibility resides in the MD's Reserve Units Bureau.
 4. As stipulated in Article 40 of the "Law of the PRC on Reserve Officers," the General Staff Department has responsibility for directing the *military training* of reserve officers. This is probably the purview of the MD. However, the political training of

⁴²⁷ "8th Roundup on Army Building Achievements," *Jiefangjun Bao*, 20 September 1999 (FBIS). Hereafter, "8th Roundup."

⁴²⁸ Han Ping, "Implement a Policy of Governance According to Law To Strengthen National Defense Reserve Development," *Guofang*, No. 1, 15 January 1999 (FBIS). This article is a long interview with the Director of the Mobilization Department of the Beijing Military Region.

⁴²⁹ See Liu Hsiao-hua, *ibid.*

⁴³⁰ Some reserve divisions Staffs, to include the command element, are actually filled with by active duty officers. Liu, *ibid.*

reserve officers and the management of the reserve officer system is the responsibility of the General Political Department.⁴³¹

5. The MD is responsible for setting the standards for various aspects of the *military training* of the local militia. This includes: the durations of training periods, the content of training syllabi, and the training standards to be met.⁴³²
6. The MD (perhaps the Equipment Section) may have a role in insuring that reserve units have the equipment they require both for training and for times of mobilization and incorporation into active PLA units. Sometime in 1998 the Central Military Commission issued a directive to the Military Regions instructing them to set aside "some of their advanced weapons and equipment" for the use of their reserve units instead of only providing decommissioned older weapons.⁴³³ One can imagine that this was likely the result of an assessment of the standards of equipment for training that the MD might have conducted.
7. The MD may have some responsibility for assessing the quality and/or management of reserve and militia training areas. According to the PLA press, between 1984 and 1999 more than 2,190 basic military training bases and technical training facilities had been constructed that were dedicated for militia training.⁴³⁴
8. The MD is responsible for activating the national mobilization system. The various non-active components of the Chinese armed forces (reserves and militia) can be mobilized in times of war, in times of internal unrest, and to "fight" natural disasters. The Central Military Commission is the national-level authority that mobilizes the reserves and militia with an "order." The MD, citing CMC authority, apparently issues "circulars" to the local-level People's Armed Forces Departments (see below) nation-wide with instructions that specify the "who," "what," "when," "where," and "why." Moreover, during times of mobilization, the MD also sometimes disburses emergency funds and equipment to activated militia or reserve units.⁴³⁵

431 "The Law of the PRC on Reserve Officers," *Xinhua*, 12 May 1995 (FBIS).

432 "Lecture Two," *ibid.*

433 Liu, *ibid.*

434 See "8th Roundup," *ibid.* Technical troops in the reserves also have dedicated facilities. Examples of PLA technical troops would be chemical warfare units, telecommunications units, meteorological units, certain logistics and maintenance units, etc. See Xie Fenfen, "Zhejiang Militia Reserve Units Stage Science, technology Military Drills," *Zhejiang Ribao*, 26 October 1999 (FBIS).

435 The 1998 floods in China resulted in a partial mobilization. See Ma Xiaochun, "PLA Mobilizes Militia, Reservists in Flood-Hit Areas," *Xinhua*, 13 August 1998 (FBIS). "The Mobilization Department under the General Staff Department of the People's Liberation Army issued an urgent circular today..."

9. Along with the GPD, the MD has a role in the oversight of the People's Armed Forces Departments (PAFD) that reside at the local levels. The PAFDs have their roots in the days of the pre-1949 "Red Army" when Mao and the CCP were fighting both the *Kuomintang* and the Japanese. Originally, they were party (CCP) organs at the village, township and county levels used to mobilize local civilians and local militia to support PLA operations. They were the backbone of logistic and personnel support to operations in the locales in which the PLA was operating, both in regular and guerilla operations. After 1949 the PAFDs became formal institutions and have gone back and forth over the years as either formal organizations of the PLA or as the military departments of the local Party Committees.⁴³⁶ As part of the massive demobilization of the PLA in the mid-1980s, the PAFDs were apparently taken out of "active service" as organs of the PLA and placed under local government control. However, with the renewed emphasis in China on building a reserve system (a "lesson" from Gulf War), PAFDs, in 1996, were reportedly made active duty organs of the PLA once again.⁴³⁷ The PAFDs are still organizations that link the local military, local party committee, and local government. The difference is now probably that PAFDs have active duty officers assigned to them to provide overall supervision of local work and insure accountability to PLA central authorities in the GSD/MD and GPD/MWD. The PAFDs have the following responsibilities:

- meeting conscription quotas,⁴³⁸
- organization and training of local militia,
- mobilization of local forces when ordered, and, since 1996
- working with the MRs to build reserve units.⁴³⁹

436 For brief background on the history, roles, and missions of PAFDs, see Zhao Jiuchang and Wu Guolu, "On Adapting to New Conditions, By Going All-Out to Reinforce Our People's Armed Forces Department Establishment," *Xinhua*, 15 May 1996. This is a lengthy interview with then-Deputy Chief of the general Staff LTG Cao Gangchuan. Cao was subsequently promoted to General and is currently the first Director of the General Armaments Department (GAD). At the time of this interview Cao, a LTG and DCoGS, has principal responsibility for mobilization, conscription, militia, and reserve issues.

437 See Liu, *ibid*, and Ting Yi, "People's Armed Forces Establishment Reportedly Returned to People's Liberation Army," *Ming Pao*, 20 March 1996. According to Liu, "Jiang Zemin personally instructed in 1996 that people's armed forces departments of counties (including county-level districts and cities) which had been put under the administration of local governments be reincorporated into the PLA...This laid the organizational foundation for the present strengthening of reserve service units."

438 For sampling of the areas of conscription work in which the MD has primacy see Zhang Min and Li Suibin, "Strengthening Quality Development In Deepening Reform; Deputy Director Fan Xiaoguang of the GSD Mobilization Department Answers Reporters' Question," *Zhongguo minbing*, 9 January 1997, in FBIS.

For these reasons, the MD has a role in supervising the work of PAFDs. The above organizational chart of the MD lists a "PAFD Bureau" as a notional bureau of the MD. Although no data was found to verify this, It is the author's suspicion that one likely exists; especially if the PAFDs have once again become active PLA organs as reported. Even if there is no specific bureau dedicated to PAFDs, there is no question that the MD, along with the GPD, is responsible for them, and those responsibilities may very well be subsumed under the other MD bureaus.

10. The MD is responsible for monitoring compliance with national-level policies on conscription, militia organization and training, and plans for mobilization. Officers from the MD are often reported in the Chinese press travelling around China inspecting the work of "grass roots" militia units, the state of training of the militia and reserves, and assessing the state of conscription. In this regard, the MD has a national-level "Inspector General" (IG) role for its particular portfolios. As an example of the MD "IG" function, in 1997 wide-scale defrauding of new recruits in local conscription centers was uncovered in which local PAFDs may have been complicit (or did not stop) local commercial firms from entering depots and "persuading" new inductees to buy life and accident insurance policies, magazine subscriptions, and generally, "wantonly collecting charges from young conscripts." Once uncovered, the MD issued a "circular" to all local PAFDs outlining the abuses and ordering them to stop.⁴⁴⁰
11. Finally, the MD likely has some role at the national level in providing guidance to National Defense Mobilization Committees (NDMCs) throughout the country. NDMCs are Military District/Provincial-level military mobilization organizations. They may very well have been in existence for quite some time. However, this student had not come across references to them in the Chinese press before 1997. According to *Liaoning Ribao* (the official newspaper of Liaoning Province), that province established an NDMC in July 1997, leading one to suspect that prior to that time there was no centrally directed requirement to have an NDMC. If Liaoning's NDMC is at all typical, then the membership if a NDMC probably looks like this:
 - Secretary of the Provincial Party Committee: First Chairman, NDMC
 - Provincial Governor: Chairman, NDMC
 - Deputy Secretary, Provincial Party Committee: NDMC Vice Chairman, NDMC
 - Commander, Provincial Military District: NDMC Vice Chairman

439 Zhao and Wu, "On Adapting to New Conditions."

440 See "PLA Calls for Stopping Malpractice in Conscription Work," *Xinhua*, 2 December 1997, in FBIS; and "General Staff Headquarters Issues Circular on Resolutely Banning Forced Insurance on Conscript Youth," *Jiefangjun bao*, 3 December 1997, in FBIS.

- Political Commissar, Provincial Military District: NDMC Vice Chairman
- Provincial Vice Governors: NDMC Vice Chairmen

Likewise, Liaoning's NDMC claims the following roles and missions for the province:

Coordination of military and economic affairs between the army and government as they pertain to mobilization issues,

- Assessment of manpower and material resources for mobilization,
- The formulation of local laws and regulations for mobilization,
- To enlist economic mobilization into general armed mobilization,
- To rationalize provincial air defense and transportation for mobilization,
- To identify civilian facilities for conversion to military use during mobilization,
- To insure provincial compliance with CMC directives for mobilization.⁴⁴¹

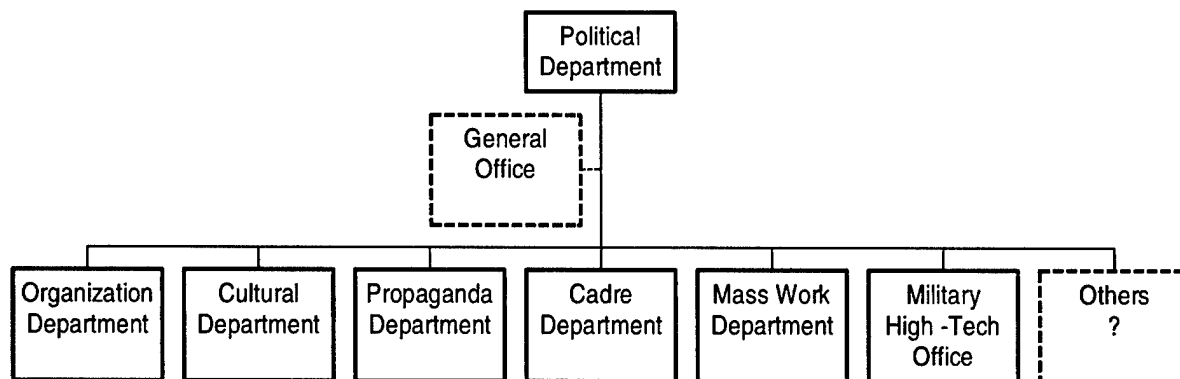
Moreover, at the national level there is a "State National Defense Mobilization Committee" (SNDMC) to which the provincial-level NDMCs are accountable. The current Vice Chairman of the SNDMC is Defense Minister and CMC Vice Chairman General Chi Haotian.⁴⁴² This may be one of the institutional portfolios (among others) of the Defense Minister. Certainly, the MD would at least be a major player at the national level, assisting General Chi in his role as SNDMC Vice Chairman.

⁴⁴¹ See Zhao Xiaoyu and Xu Shuangxi, "Liaoning Defense Mobilization Committee Established 7 July, *Liaoning Ribao*, 8 July 1997, in FBIS.

⁴⁴² Chi Haotian is identified as SNDMC Vice Chairman in Ma Xiaochun, "Chi Haotian Stresses Adhering To Idea of People's War, Speeding Up the Pace of Building Civil Defense," *Xinhua*, 8 May 2000 (FBIS). For another reference to the State National Defense Mobilization Committee see Zhou Yinnan Gang Boyou, "Nanjing PLA Mobilization Committee Meets," *Zhejiang Ribao*, 7 May 1999, in FBIS. This article also goes into more background on the "dual leadership nature" (military-civilian) of provincial-level NMDCs.

Political Department (*Zhengzhi Bu*)

Figure 4.11 GSD Political Department



The Political Department (PD) of the GSD provides the linkage between the officers, men, and organs of the GSD to the Chinese Communist Party and its programs and policies. Like all political departments in the PLA it is responsible for "ideological work" and "party work" for the work unit (*danwei*) to which it is organic; in this case the entire GSD. This means organizing and supervising the work of the party committees that reside within the sub-organizations of the GSD, carrying out ideological education, and vetting the political *bona fides* of the officers and troops throughout the GSD organization.⁴⁴³ In a nutshell, to borrow a phrase from Harlan Jencks, the PD, through its work, has the dual function of "education and control."⁴⁴⁴

The PD of the GSD likely takes its lead from the General Political Department (GPD) on party and political matters (with the GPD issuing its directives under the authority of the CMC). The PD then insures that subordinate GSD organs and personnel comply with policies. For example, it would fall to the GSD's Political Department to ensure that all GSD organizations and personnel are engaged studies supporting the

⁴⁴³ For a reference to the party committees of the GSD and their role in carrying out GPD guidance see Wang Zhiyun and Deng Ying, "PLA Strengthens Education of leading Cadres," *Xinhua* 13 April 1996, in *FBIS*. For more on the work of party committees in the PLA see Chapter 4 in Harlan Jencks, *From Muskets To Missiles: Politics and Professionalism in the Chinese Army, 1945-1981*, (Boulder, Colorado: Westview Press, 1982; and Monte R. Bullard, *China's Political-Military Evolution: The Party and the Military in the PRC, 1960-1984*, Boulder, Colorado: Westview Press, 1985.

⁴⁴⁴ Jencks, p. 141.

"Three Stresses Campaign" ("*San Jiang Yundong*") that Jiang Zemin initiated in 1999 and which continues as of this writing. Guidance on the amount of time required to be devoted to such political study and probably the actual lesson plans to be used by GSD party committees would probably come from the PD which, in turn, would receive guidance and teaching materials from the GPD.

But in the PLA, the Political Department system is involved in much more than ideological work. It is concerned with "rice bowl" issues near and dear to the members of the command: nearly all personnel issues. Housing assignments, "IG complaints," retirement and separation benefits, demobilization assistance, authorization for dependant travel or changes of residence, permission to travel abroad or even "out of area" travel within China, annual leave, etc. are all part and parcel of the responsibilities, to one degree or another, of Political Departments.⁴⁴⁵

Moreover, since PLA political departments maintain control over the military mass media, they play an important role in "getting the word out" to a massive organization, far flung across China. And "the word" it gets out is not just the political line of the CCP, but often important news on professional military issues and policies. Indeed, if the GPD's official newspaper, *Jiefangjun Bao* (*Liberation Army Daily*), did not also write extensively about professional military issues, this very paper would be near impossible to attempt.

It would not be too far-fetched, then, to think of political departments as a combination of ideological watchdog, public affairs office, personnel office, IG office, "morale and welfare" office, security clearance adjudication office, athletics office, and the like. There simply is no single analogue in the U.S. system. But Political Department officers (members of the political commissar system) are much more than mere "party hacks" within the PLA system, although they personify and enforce the grip of the party over the military establishment.

Before presenting the organizational structure of the PD, brief digression on the issue of personnel transfers is warranted. We take note that Article 208 (Service Personnel), Section (2) of the "PLA Routine Service Regulations" issued in October 1997, spells out personnel transfer procedures and shows the importance of the PD in these matters.

The selection and employment of service personnel is subject to the examination and recommendation of the user units and the authorization of senior officers, and their transfer formalities are handled by military affairs departments. Service personnel for important posts must pass the

⁴⁴⁵ These points are based on conversations this author has had with knowledgeable individuals since 1998 on a variety of subjects related to "grass roots issues" of life in the PLA.

screening of political organs before they are transferred to a unit.
Unqualified service personnel must be promptly transferred away.⁴⁴⁶

Organization. The organizational chart of the PD above is likely incomplete, hence the box in dashed lines listed as "Others?" However, there is a pretty high level of confidence that the sub-organizations listed are valid in as much as they are either identified in various issues of the *DPMP* or in other mainland press holdings on hand. Still, little information was found on the roles and missions of these few sub-organizations of the GSD's PD. Therefore, some speculation is called for; speculation mainly derived by looking at counterpart organizations in the General Political Department as listed in the *DPMP* for 1998:

General Office (Bangong Ting). Strictly notional on the part of the author in keeping with the assumption that all of the major sub-organizations of the GSD have their own administrative organ.

*Organization Department (Zuzhi Bu).*⁴⁴⁷ Working from the 1998 *DPMP*, the GPD's Organization Department has such sub-organizations as the "Party Affairs Bureau" and the "Youth Bureau." Assuming some parallelism, the GSD/PD organization Department may be the hub of CCP activity for the GSD to include oversight of party committees.

*Cultural Department (Wenhua Bu).*⁴⁴⁸ Using the same methodology as above, the 1998 *DPMP* has the GPD's "Cultural Department" as having the following bureaus: Literature and Arts Bureau; Sports Bureau; Drama Troupe; Opera Troupe; Song/Dance Troupe. Therefore, within the GSD the PD may be responsible for entertainment and recreational activities.

*Propaganda Department (Xuanchuan Bu).*⁴⁴⁹ Within the GPD, according to the 1998 *DPMP*, the Propaganda Department has a PLA television center. So within the GSD the Propaganda Department is likely in control of mass communications media within the GSD.

*Cadre Department (Ganbu Bu).*⁴⁵⁰ The GPD's Cadre Department (*DPMP* 1998) has a "Civilian S & T Bureau," a "Reserve Service Cadre Bureau," and "Welfare Bureau." The cadre department within the GSD's PD is likely the organization that maintains personnel records and deals with transfers or assignments.

*Mass Work Department (Qunzhong Gongzuo Bu).*⁴⁵¹ The GPD's Mass Work Department (again, the 1998 *DPMP*) has within it a "Mass Work Bureau," a "Militia

⁴⁴⁶ "People's Liberation Army Routine Service Regulations (Articles 207-276)," *Jiefangjun bao*, 14 October 1997, in FBIS. Italics added.

⁴⁴⁷ Identified in various issues of the *DPMP* (see 1995) as well as in Melvin's files.

⁴⁴⁸ Identified in Melvin's files and the *DPMP* (1995).

⁴⁴⁹ Identified in Melvin's files and the *DPMP* (1998).

⁴⁵⁰ Identified in *DPMP* (1998).

⁴⁵¹ Identified in *DPMP* (1998).

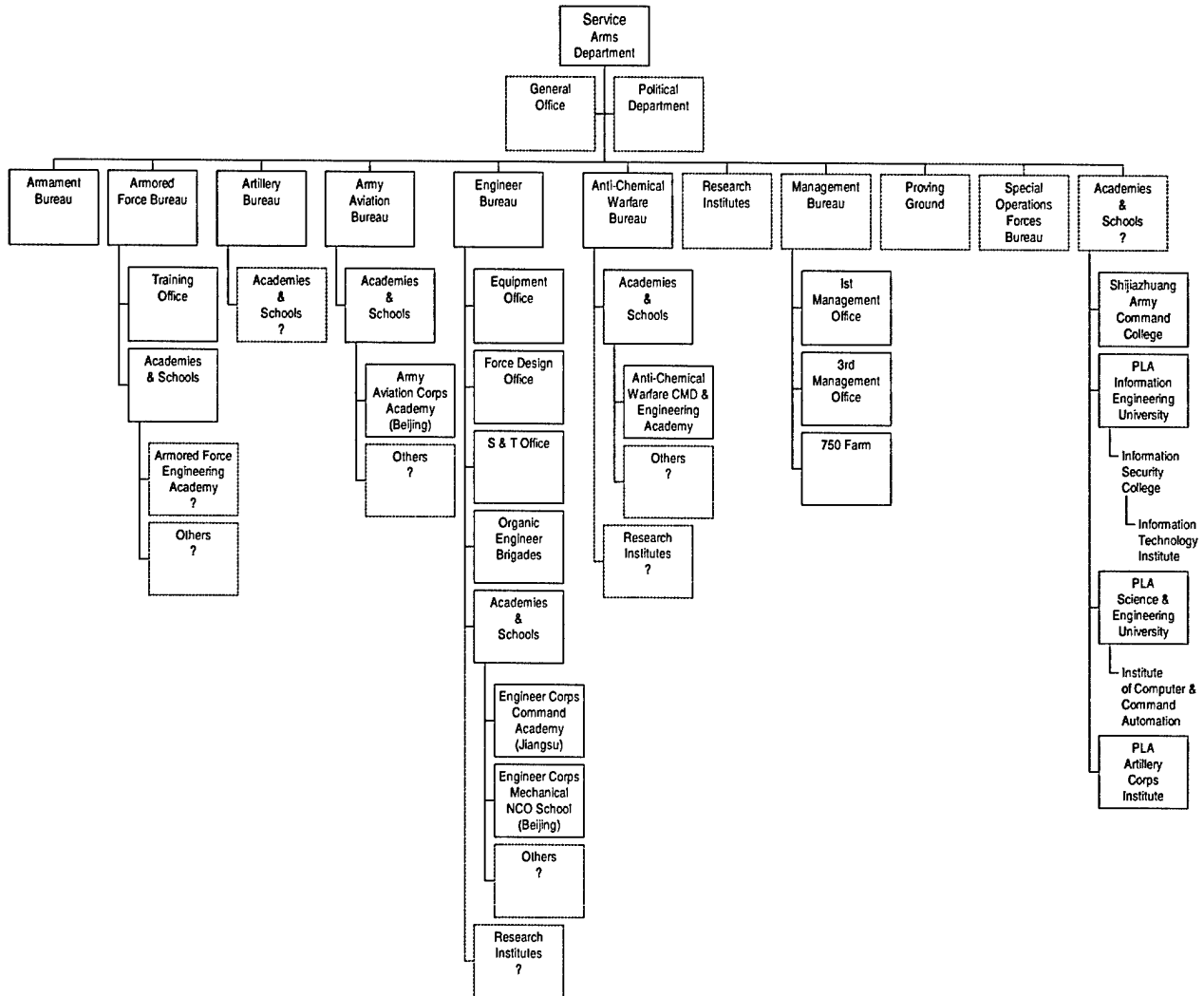
Bureau," and a "Militia Political Work Bureau." Although this is very speculative, it may be that the Mass Work Department of the GSD PD works with the GSD's Mobilization Department and Training Department as well as with the GPD in managing some aspect of militia and possibly even reserve affairs at the national level. (Recall from previous sections in this paper that militia work is multifurcated: the Mobilization Department and the Training Department of the GSD involved in professional military aspects of militia and reserve work while the GPD has responsibility for political work.)

*Military High-Tech Office.*⁴⁵² This is the author's shorthand (given the constraints of the organization chart program) for what Ellis Melvin translates as the "Military High-Tech Application and Management Professions Examinations Committee Office." The Chinese for this office, which Melvin identifies in the 30 December 1999 edition of *Jiefangjun Bao*, is: *Zongcanmoubu Zhengzhibu Junshi Gaoji Zhuyingyung Yu Guanli Zhuanye Kaoshi Weiyuanhui Bangongshi*. Melvin speculates that this committee conducts some sort of proficiency testing. Another speculative role one could imagine for this committee is a function of the fact that it is located within the GSD's Political Department. Specifically, this committee may be involved in ensuring that Jiang Zemin's emphasis on high-tech training and learning in the PLA---both in formal unit training and in individual professional education---continues to receive proper emphasis within the GSD. Again, this is very speculative.

⁴⁵² Ellis Melvin is the only source for the existence of this committee. He provided to this author the citation in *Jiefangjun Bao*, as well as the Chinese characters for the committee, his preferred translation of the name of the committee, as well as some speculation on his part about what this committee might be involved in.

Service Arms Department (*Bingzhong Bu*)

Figure 4.12 GSD Service Arms Department



Background. The Service Arms Department (SAD) manages the "technical" branches of the PLA ground forces. It is a relatively new department of the GSD created out of long-established GSD organizations.

The SAD was established in 1993 by subsuming what were previously autonomous department (*bu*) level organizations under the GSD and placing them under a new department-level headquarters. Specifically, the SAD absorbed the former Armor Department, Artillery Department, Engineer Department, and Anti-Chemical Warfare Department.⁴⁵³ All of these are now bureaus (*ju*) under the SAD. Also brought under the SAD was the Army Aviation Department.⁴⁵⁴ Note that the SAD does not have a separate bureau for infantry.

The SAD manages what would be called "branches" of the ground forces in the U.S. Army but that are considered to be "technical branches" by the PLA. These "branches" are sometimes referred to by the PLA as "corps," such as the "Armored Corps," "Artillery Corps," "Engineer Corps," etc. Sometimes they are referred to as "forces," such as "Armored Forces," "Anti-Chemical Warfare Forces," etc.

In a 1997 interview in *Wen Wei Po* former SAD Director Major General Xiao Zhentang asserted that the "branches" managed by the SAD "...now take up more than two-thirds of the entire ground force establishment."⁴⁵⁵ If taken at face value, then there are two implications attendant to this statement. *First, today, the PLA ground forces are predominantly a mechanized infantry and armor force, not a predominantly "light infantry" force as in years past.* Second, if true, the SAD has oversight over a massive portion of the PLA ground forces establishment, to include its internal infrastructure, its academies, its research institutes, etc.

Terminology for this department gets confusing. This author has adopted the term "Service Arms Department" (*Bingzhong Bu*) following the most recent usage in the *DPMP* (1999). "*Bingzhong*," however, literally translates to "branch (of the army)" in Chinese, not "Service Arms."⁴⁵⁶ In the 1993, 1994, and 1995 editions of the *DPMP* this organization was listed as the "Specialized Arms Department" (*Tezhongbing Bu*), but in

⁴⁵³ Hua Chun, Chang Hung, and Tu Hsueh-neng, "Arms of Service Have Become Ground Force's Principal Force--Interviewing Major General Xiao Zhentang, Director of Arms Department of General Staff Headquarters," *Wen Wei Po*, 31 July 1997, in FBIS. Xiao specifically mentions that "the Chinese arms of service" mainly comprise "...the artillery, armored forces, engineers, and anti chemical warfare corps."

⁴⁵⁴ The 1988 issue of the *DPMP* carries Army Aviation as a full department under the GSD. In the 1996, 1998, and 1999 editions the *DPMP* carries it as a bureau under the SAD.

⁴⁵⁵ Hua Chun, Chang Hung, and Tu Hsueh-neng, "Arms of Service."

⁴⁵⁶ See *Xin Ying-Han Jun Yu Ci Dian* [New English-Chinese Military Terminology Dictionary], Luoyang: Foreign Language Institute Research Department, 1983. See also Joseph D. Lowe, *A Dictionary of Military terms: Chinese-English, English-Chinese*, Boulder, Co: Westview Press, 1977.

1996 the term was dropped by the *DPMP* in favor of "Service Arms Department." At the same time, an official Chinese biography of Major General Chen Benyan (first Director of the SAD) provided to this author in 1998 by a PLA-affiliated research institute referred to the SAD in English (no Chinese given) as "Special Arm Department."⁴⁵⁷ Moreover, various articles about this organization carried by the *Foreign Broadcast Information Service* (FBIS) refer to the SAD as the "Arms Department" of the PLA General Staff Headquarters.

Finally, by way of background, one might ask why the SAD was created. Clearly, some serious "rice bowls" were broken within the GSD by downgrading the old-line autonomous departments to bureaus. Frankly, one can only speculate at this point. One possible reason could have been to continue the general trend of headquarters streamlining (eliminating redundancy); an ongoing effort within the PLA for quite some time. However, a significant reorganization of this sort may have had some operational rationale behind it. One possible explanation is circumstantial. It was at about this point in time, circa 1993, that the lessons of the Gulf War were being studied by the PLA, and at about this time that Jiang Zemin had declared that "Local Wars Under Modern, High-Tech Conditions" would be the focus of PLA modernization programs and reform. Consequently, one can speculate that the creation of the SAD would both reduce the size of the staffs involved *and* allow for a greater focused and coordinated modernization and reform effort for these critical PLA branches of the ground forces.

Roles & Missions. The key functions of this department were implied by former SAD Director, Major General Xiao Zhentang, in a 1997 interview when he referred to the need to insure that the PLA is "well-equipped, well-trained, and technically competent."⁴⁵⁸ Moreover, when reviewing the skeletal organizational chart for the SAD that has been pieced together above we are able to surmise that each of the "branches" under the SAD *probably*:

- provide oversight of the management of their respective "branch" schools,
- develop *tactical* and *technical* doctrine for their respective branches,
- determine special equipment requirements,
- develop branch-specific training standards,
- manage organic technical research institutes that support their branch, and,
- manage branch "proving grounds" for either new systems or new tactics.

In fact, the roles and missions of the SAD may be quite similar to those performed by the headquarters of the other major PLA services: the PLA Air Force, the PLA Navy, and the Strategic Rocket Forces (2nd Artillery). Indeed, these roles and missions would

⁴⁵⁷ According to the biography provided by the Chinese institute, "From 1985 to 1992, he (MG Chen Benyan) became the director of the Armored Force Department under the General Staff. From 1993 to 1995, he assumed the office as director of the Special Arms Department under the General Staff."

⁴⁵⁸ Hua Chun, Chang Hung, and Tu Hsueh-neng, *ibid*.

not be too much different than the roles of the Services (Army, Navy, Air Force, Marines) in the United States: "to equip and train."

If in fact this is anywhere close to being an adequate description of the functions, roles, and missions of the SAD, then, clearly, in performing these tasks SAD bureau directors and SAD "branch" staff officers are likely engaged in a tremendous amount of coordination outside the SAD. Within the GSD itself SAD officers are likely coordinating a good deal with counterparts in the Training Department (training and schools) and Military Affairs Department (regulations and management issues).⁴⁵⁹ Outside of the GSD, SAD staff officers would need to be coordinating with elements of the newly established General Armaments Department (equipment requirements), the General Logistics Department (equipment maintenance and logistic issues), and possibly with research institutes or laboratories outside of the PLA proper, such as within the new COSTIND. SAD staff officers are also likely in constant contact with appropriate sections of the Academy of Military Sciences as they ponder the question, "how do we translate fighting 'local wars under modern, high-tech conditions' into branch-specific doctrine and tactics?" This in turn, becomes a SAD training and schools issue.

Organization. The organization chart for the SAD above is far from complete. *If* the SAD in fact has the functions, roles, and missions outlined above, then each bureau should have schools, academies, and research institutes associated with it that are spread across China. Indeed, one could easily envision SAD staff officers constantly travelling around China on "temporary duty" inspecting SAD assets---schools, training grounds, research institutes, units, etc. The schools issue is becoming very confusing at this point because of the ongoing reform of professional military education in the PLA. Whereas once the "branches" had many schools, they are now being consolidated and merged. We simply do not know how many are left under "branch bureau" management.

In the sub-sections on organization that follow it will not be possible to present the entire structure of each "branch bureau" given the relative paucity of data at hand. What is listed are those sub-organizations for which there is data and some we can speculate to exist (broken lines on the chart). But the reader should envision the SAD as probably one of the larger departments in the GSD in structure, if not in personnel, and as a "core" department as far as managing the fighting forces go. Where interesting tidbits about a branch or SAD organization has been uncovered it will be presented, even when its position in the section seems a bit out of context.

General Office. Notional on the part of the author. The General Office would serve as the administrative headquarters of the SAD.

⁴⁵⁹ Based on numerous articles in the PLA press and by Xinhua it is important to point out that the training experiments carried out by the Training Department of the GSD, and described in the previous section of this paper on the Training Department, involve a significant amount of coordination and cooperation with the Service Arms Department. Moreover, it appears that the branch bureaus under the SAD are conducting their own training experiments as well.

Political Department. Also notional, keeping with our assumption that all major GSD sub-organizations have a Political Department.

*Armament Bureau.*⁴⁶⁰ It is unclear what this bureau does. It may have some role in coordinating the equipment and weapons requirements of the branches under the SAD. Since the creation of the General Armaments Department (GAD, *Zong Zhuangbei Bu*) in 1998, the GSD's "old" Armament Department (*Zongcanmou Bu Zhuangbei Bu*), sometimes called the Equipment Department in English, seems to have been abolished as a separate department under the GSD. The Armament Bureau under the SAD may have taken its place in a much watered-down and more focused role.

Armored Force Bureau. This bureau is responsible for the modernization, reform, and training of the PLA's Armored Force, a branch of the ground forces that was established in 1950 and which today is considered by the PLA to be one of the "high-tech" and "science and technology intensive" branches of the army.⁴⁶¹ By reading what we can in *Xinhua* and *Jiefangjun Bao* we can come away with a pretty good idea of the role this bureau plays in managing the armor force. *And by extension, we might even say that the generic functions below are the same for all of the major branch bureaus under the SAD:*

- Develops standards for large unit armor training, small unit armor training and individual "tanker" training.⁴⁶²
- Develops armor tactics and doctrine.⁴⁶³
- Dispatches armor specialists and experts down to the brigade level to provide technical guidance or education.⁴⁶⁴
- Dispatches experts to "train the trainers" (author's term), at armor force schools, academies, and in units down to the brigade level.⁴⁶⁵
- Has some role (unclear at this point) in the development of new weapons systems and equipment for the branch.⁴⁶⁶

⁴⁶⁰ Listed as part of the SAD in the 1995, 1996, 1998, and 1999 editions of the *DPMP*.

⁴⁶¹ "PLA Armor Force Improves Weapons Systems," *Xinhua*, 16 December 1997, in FBIS.

⁴⁶² "Armed Forces Increase Armored Units Combat Strength," *Xinhua*, 17 May 1999, in FBIS.

⁴⁶³ Ibid.

⁴⁶⁴ Ibid.

⁴⁶⁵ Ibid.

⁴⁶⁶ "PLA Armor Force Improves Weapons Systems," *Xinhua*, 16 December 1997, in FBIS.

- Develops branch-specific maintenance programs and maintenance training programs to include promulgating maintenance regulations, and dispatching maintenance experts down to units.⁴⁶⁷
- Provides oversight of "branch" schools and academies.

In the case of the Armored Force Bureau, two academies were identified, Armored Force Command Academy⁴⁶⁸ and the Armored Force Engineering Academy (AFEA). The Armored Force Command Academy is now part of the Shijiazhuang Army Command College and no longer under this bureau (see section below on SAD schools and institutes). The AFEA may no longer reside under the Armored Force Bureau. The *DPMP* for 1999 lists it as under the General Armaments Department. For the moment, we shall continue to carry it under the SAD. According to one article in *Guangming Ribao* the AFEA is "the only tertiary institution of the Armored Corps for engineering technology." It is likely located near the *Lugouqiao* (Marco Polo Bridge) in the vicinity of Beijing but traces its roots to the Department of Armor of the Harbin Military Engineering Academy.⁴⁶⁹ The AFEA is probably a four-year institution that graduates newly commissioned armor officers. But it also confers graduate-level degrees (MA, Ph.D.) in technical subjects.

In the 1988, 1990, and 1991 editions of the *DPMP* a "Training Office" was listed under the "old" (pre-SAD) Armor Department. Whether this office followed the Armor Department when the latter became a bureau under the SAD is unknown. One suspects that the only reason it would not have followed is if the SAD had established a centralized "Training Bureau" that had elements from all of the former "branch" departments. There is no evidence at this time of such a centralized training bureau under the SAD, however. Do the other "branch" bureaus (Engineers, Aviation, Anti-Chemical, Artillery) have training offices? Probably, but no hard evidence was found by this student at this point.

Artillery Bureau. Another of the older "branch" organizations that traces its roots to the late 1940s. It likely has near-identical roles and functions as the Armored Force Bureau. We speculate that the Artillery Bureau has many schools and institutes but note that at least two were recently combined to form the PLA Artillery Corps Institute. It is

⁴⁶⁷ Guo Zhenfeng, "Unify Train of Thought in Line with New Programs--Arms Department of General Staff Department Assembles Technological Guarantee Officers of Armored Force for Training," *Jiefangjun bao*, 5 March 1996, in FBIS.

⁴⁶⁸ For mention of the Armored Force Command Academy see "Central Military Commission Chairman Jiang Zemin Signs Commendation Order," *Jiefangjun Bao*, 2 April 1997 (FBIS). A certain Zhang Jinyin, former Deputy Director of the "General Staff Department Armored Force Command Academy Military Affairs Department" received a posthumous award.

⁴⁶⁹ Zhu Zhenguo and Li Ting, "Meet Challenge of World Military Development--Interview with Major General Wang Hongguang, Commandant of PLA Armored Force Engineering Academy," *Guangming Ribao*, 18 November 1998 (FBIS).

unclear at this point if the new institute resides directly under the Artillery Bureau or is under some more generic (notional) office in the SAD providing oversight to the new combined academies. (See section below on SAD Schools & Academies).

Engineer Bureau. The Equipment Office, Force Design Office, and S & T Office listed under the Engineer Bureau were organizations previously listed in the *DPMP* (prior to the creation of the SAD) when the Engineer Corps had a department-level organization under the GSD. The functions of these offices are not known. Nor is it clear if these offices "carried over" when the engineers were subsumed by the SAD. For the purposes of this paper we shall assume they did come over to the SAD.⁴⁷⁰

Since 1993, and the creation of the SAD, the *DPMP* has carried under the Engineer Bureau various unidentified organic engineer brigades.⁴⁷¹ We can probably have a high degree of confidence, given the nature of the diverse work of army engineers, that the Engineer Bureau has a good number of organic units directly under its control as national-level assets. Indeed, we continue to see oblique references to such units in the Chinese press. For example, an April 2000 *Xinhua* article noted the following:

The Chinese People's Liberation Army (PLA) has established 18 special fast-reaction units to fight natural disasters, according to army sources. The emergency units, which are part of the PLA engineering corps, are the first of its kind in army history...The PLA headquarters plans to build these units into powerful task forces within three to five years.⁴⁷²

Clearly, the Engineer Corps will also have its own schools and academies and likely have its own research institutes as well. The "schools and academies" question is as confusing for the engineers as it is for the other branches given the ongoing consolidation and reform of the PLA professional military education system. For example, the "new" PLA Science & Engineering University" (created July 1999) incorporated the "old" PLA Engineering Institute along with other non-Engineer Corps schools and is likely no longer under the Engineer "branch" bureau. (See section below on SAD Academies and Schools). We do include the following academies and schools under the Engineer Bureau on our chart based on their inclusion in the *DPMP* for 1999 and the fact no data on their status has been found as a result of the reform of the PLA school system:

- Engineer Corps Command Academy (Xuzhou, Jiangsu)
- Engineer Corps NCO School (Beijing)⁴⁷³

⁴⁷⁰ The Equipment Office was carried in the 1988, 1990, and 1991 editions of the *DPMP*. The Force Design Office was carried in the *DPMP* for 1988, 1990, and 1991. The same *DPMP* editions carried a S & T Office.

⁴⁷¹ See *DPMP* for 1993, 1994, 1995, 1996, and 1999.

⁴⁷² "PLA Sets Up Fast-Reaction Units To Combat Natural Disasters," *Xinhua*, 4 April 2000, in FBIS.

⁴⁷³ *DPMP* (1999), p. 206.

The issue of R & D institutes is also subject to some confusion due to the creation of the GAD in 1998. Nevertheless, we can say that the focus of Engineer Corps equipment and systems development and research is likely more geared to combat engineer functions than civil engineering requirements. For example, PLA and other Chinese press articles that do discuss PLA Engineer Corps systems tend to focus on mine-laying, mine-clearing, and field camouflage issues.⁴⁷⁴

Anti-Chemical Warfare Bureau. Like other "branch" bureaus under the SAD, the Anti-Chemical Warfare Bureau (ACWB) mission is to "equip and train." In the case of the ACWB the mission is to insure the PLA can operate effectively in a nuclear, biological, and chemical warfare (NBC) environment.

The Anti-Chemical Warfare Corps (ACWC) of the PLA became a formal "branch" of the ground forces in 1956 when the Central Military Commission established the "Anti-Chemical Warfare Department" (presumably under the GSD), although the PLA had established an anti-chemical warfare school as early as 1950.⁴⁷⁵ The PLA continually refers to its Anti-Chemical Warfare force as a "defensive force." However, in a 1997 interview a SAD spokesman, in reviewing the history of the ACWC, indicated that in the past the use of flame-throwers by ground troops was a ACWC responsibility. According to the spokesman:

In 1955, the flame throwing company of a certain division, together with the infantry, took part in a battle to liberate Yijiangshan Island, thus creating the first successful example of using flame-throwing soldiers in battle. In the Sino-Indian self-defense counterattack war, the flame throwing detachment of the anti chemical warfare corps annihilated a total of 81 enemy firing points.⁴⁷⁶

What is of interest here, is that in the U.S. Army a flame-thrower would be considered just another weapon for an infantryman whereas in the PLA, at least in the past, it required special Anti-Chemical Warfare troops to use it, or even have it in the unit table of organization and equipment (TO & E). Whether or not this is still the case is unknown.

⁴⁷⁴ For example, see Zhao Xiuhuan, "Engineering Corps Develops Mine Laying, Other Equipment," *Xinhua*, 15 December 1997, in FBIS and "PLA, U.N. Confirm PRC's World Standards in Clearing Mines," *Xinhua*, 14 April 2000, in FBIS. Of interest, this latter article notes that over 1,000 PLA "mine-clearing troops" have been involved in clearing landmines from the Sino-Vietnamese border since 1992.

⁴⁷⁵ Zhu Fengqi and Huang Chuangxin, "China's Antichemical Warfare Corps Already Possesses a Whole Set of Anti-Nuclear and Anti-Chemical Technology and Equipment," *Zhongguo xinwen she*, 13 July 1997, in FBIS.

⁴⁷⁶ Ibid.

The same interview mentions, without providing any detail, that ACWC troops also "took part in experiments on China's first atomic bomb and hydrogen bomb." But this is not surprising given that in the U.S. Army the Chemical Corps is responsible for teaching troop protection and conducting decontamination as a result of the use of nuclear weapons by an enemy.

Like the other "branch" bureaus of the SAD, the ACWD has its own academies and schools. According to *Xinhua*, "The cultivation of personnel constitutes the major task of the Anti-Chemical Corps. It was learned that over the past 10 years and more, China has gradually established regular anti-chemical colleges and schools. At present, there are anti-chemical schools in the south and anti-chemical schools in the north."⁴⁷⁷ The *DPMP* (1999) identifies at least one of those schools: the Anti-Chemical Warfare Command & Engineering Academy located in Beijing (Changping).⁴⁷⁸

Moreover, claims in various articles that the ACWC has developed a multitude of NBC defense-related equipment allows us to speculate with some confidence that the ACWB also has affiliated research institutes.⁴⁷⁹

Special Operations Forces Bureau. No written information was uncovered to suggest that "special operations" is a separate "branch" of the PLA or a responsibility of the SAD. The inclusion of a notional "Special Operations Bureau" is presented solely on the basis of a passing comment made by a former GSD Department Director to the author that the SAD "includes" special operations forces.

Research Institutes. The 1994, 1995, and 1996 editions of the *DPMP* carry entries for unidentified research institutes under the Service Arms Department. Consequently, I have chosen to display an organizational "block" on the SAD chart above as a placeholder. This is not meant to imply that there is a central organ (bureau, office, etc.) under the SAD that oversees SAD-affiliated research institutes, but to remind that the SAD likely has a number of institutes affiliated with it that are engaged in the research and development of weapons or other equipment for the branch bureaus. That affiliation may be under each of the "branch" bureaus that the research institutes support, not under the SAD headquarters per se. Moreover, it is unknown if the branch research institutes even continue to reside within the GSD/SAD. They could well have been transferred to either the newly-created GAD or the newly-civilianized COSTIND.

Management Bureau. The inclusion of a Management Bureau under the SAD is based on data provided by Ellis Melvin in which PLA periodicals identify a "1st Management Office," a "3rd Management Office," and a "750 Farm."⁴⁸⁰ If Eftimiades'

⁴⁷⁷ "PLA Anti-Chemical Corps Improves Ability," *Xinhua*, 26 December 1997, in FBIS.

⁴⁷⁸ *DPMP* (1999), p. 202.

⁴⁷⁹ Ibid. The ACWC "...has developed about 1,000 kinds of protection equipment, with more than 600 items of them having won the state- and army-level sci-tech progress awards."

⁴⁸⁰ Melvin's date comes from *PLA Health* magazine (March-April 1998, p. 4), *Jiefangjun Bao* (11 July 1999), and *Jiefangjun Bao* (15 April 1999), for the 1st

description of the "General Management Bureau" under the Second Department is correct, then the two offices and the farm identified by Melvin would suggest that the SAD also has a bureau that provides support services to the SAD.⁴⁸¹

Proving Ground. This is a very tentative entry. An unidentified "proving ground" under the SAD was referenced in the PLA press in 1995.⁴⁸² Given the roles and functions of the branch bureaus under the SAD, it would not be out of the question that "branch" proving grounds continue to exist. However, it is also possible that whatever proving grounds were previously under the branch bureaus (from pre-SAD days as autonomous GSD departments) may have been transferred to the new GAD. We just do not know.

Schools & Academies. As mentioned previously in this paper, the PLA began a major restructuring and consolidation of its professional military education system in 1999. The picture is still confusing. But it appears at first glance that the first wave of consolidations that we know about affected military schools and academies that were previously under the "old" pre-SAD "branch departments" and the post-SAD "branch bureaus." It is not clear to this student if the new academies (listed below) are actually under the SAD headquarters or if they "stand alone" as part of the greater GSD. But they are affiliated in function with the SAD (except in at least one case) so for now we shall place them under the SAD (under a "notional" box labeled "Academies and Schools"). All of the newly consolidated academies and schools listed below were authorized in the summer of 1999 by order of Jiang Zemin in his capacity as Chairman, Central Military Commission:

- Shijiazhuang Command College. Likely affiliated with the Armored Force Bureau of the SAD. It was created by merging the former Army General Staff College and the Armored Forces Command Academy. It will be responsible for "training army command cadres and staff of medium ranking, Armored Forces cadres in charge of growth, and Armored Forces cadres specializing in education technology." It will offer master's degrees and doctorates in military science and

Management Office (*Zongcan Bingzhong Bu Yi Guanli Chu*), 3rd Management Office (*San Guanli Chu*), and 750 Farm respectively.

⁴⁸¹ I chose not to use Eftimiades' terminology for the Second Department (General Management Bureau) for the SAD, although I believe he accurately describes the functions of both management bureaus as providing services and support to their respective departments. Two reasons for rejecting his usage for the SAD. First, the *DPMP* identifies a Management Bureau (*Guanli Ju*) for the GSD and I have been using the *DPMP* series as a baseline throughout this study knowing that it is based on the close reading of PLA periodicals. The sources that Eftimiades uses to give us his terminology, on the other hand, cannot be verified. Second, the term "general" (*zong*) in front of an organization usually connotes a higher place in the PLA bureaucracy than this organization (the Management Bureau of the SAD) would warrant.

⁴⁸² This data point was provided to the author by Ellis Melvin.

technology. "The college is a more highly integrated medium-level command academy that combines command, management, and technology."⁴⁸³

- PLA Information Engineering University. The result of the merger of the PLA Institute of Information Engineering, the PLA Electronic Technology College, and the PLA Survey and Mapping College, this institute plans to have an enrollment of over 10,000 students.⁴⁸⁴ One infers from the articles cited that this institute has actually expanded in scope of syllabus and size of student body. It will offer master's degrees in 22 subjects and disciplines and will also have 8 fields of doctoral studies.⁴⁸⁵
 - The "University" likely consists of several "colleges," and those colleges, in addition to their teaching functions, likely have subordinate "institutes" engaged in research and development. For example, one *Xinhua* article identifies the "Information Security College" as part of the University and under the college is an "Information Technology Institute" that was credited with developing a "mobile telecommunications exchange platform" for wartime use by the PLA.⁴⁸⁶
 - Clearly, this university was created by merging an Engineer branch school with a Communications Department (4th Department) school, and a Survey & Cartography Bureau school. It may rightly reside under the Communications Department, not the SAD. We are just not sure at this point.
- PLA Science & Engineering University. Created by merging the PLA Institute of Communications Engineering, the PLA Engineering Institute of the Engineer Corps, the Meteorology Institute of the PLA Air Force, and the GSD's No. 63 Research Institute. Of special interest, the reported mission of this university will be to train "almost 1,000 researchers each year" in the fields of "information warfare, communication and command automation, engineering for the Engineering Corps, military meteorology, and combined arms command."⁴⁸⁷ According to a Hong Kong newspaper report the University will host a newly created "Institute of Computer and Command Automation," the focus of which will be information warfare and "counter-information."⁴⁸⁸ Again, this university

⁴⁸³ Ma Xiaochun, "PLA Sets Up Four New Academies," *Xinhua*, 2 July 1999, in FBIS.

⁴⁸⁴ "PLA Establishes New Military Schools Per Jiang Decree," *Xinhua*, 2 July 1999 (FBIS).

⁴⁸⁵ Ma, "PLA Sets Up Four New Academies."

⁴⁸⁶ "Chinese Army Develops Mobile Telecommunications Exchange Platform," *Xinhua*, 13 June 2000, in FBIS.

⁴⁸⁷ Ibid.

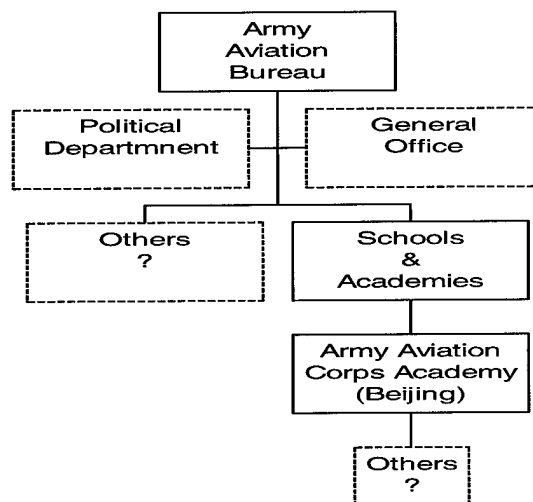
⁴⁸⁸ "PLA Trains Personnel for Information Warfare," *Tai yang pao*, 15 September 1999, in FBIS. This article lists Major General Si Laiyi as first President of the

seems to be a better fit under the Communications Department, or even under the GSD itself given the organizations from which its component institutes came.

- PLA Artillery Corps Institute. This institute was formed by the merger of the Hefei Artillery Corps Institute and the Nanjing Artillery Corps Institute. "It is in charge of the academic education of Artillery Corps officers and the training of doctorate and master's degree students and other high-level Artillery Corps personnel." Of note, according to *Xinhua*, this institute has been designated by the CMC and GSD as an "advance unit" in "joint foundation training." It appears to be mainly an undergraduate institution for field artillery, and "unmanned machine engineering." It will also offer five "new" undergraduate disciplines: command automation engineering, computer science and technology, mechanical engineering and automation, electrical engineering and automation, and information engineering.⁴⁸⁹

Army Aviation Bureau (*Luhang Ju*).

Figure 4.13 GSDArmy Aviation Bureau



University. The *DPMP* for 1999 lists MG Si as Commandant of the Science & Engineering University (located in Nanjing) as of 25 June 1999. The *DPMP* for 1998 listed MG Si Laiyi as Commandant of the Communications Command Academy of the GSD in Wuhan. In as much as the Communications Command Academy is a Communications Department school, we have further evidence to support the hypotheses that (1) the Communications Department of GSD has the lead for Information Warfare and (2) the new University may actually come under the Communications Department, not the SAD. For now, however, we shall leave it under the SAD.

489 Ma, "PLA Sets Up Four New Academies."

The Army Aviation Corps (AAC), the newest "branch" of the PLA ground forces, is comprised of rotary wing aircraft (helicopters). The following passage from a 1996 *Kuang Chiao Ching* article on the AAC is worth quoting in its entirety as it gives an excellent overview of AAC organizational history.

For the purpose of improving the combined combat strength of the newly organized group armies after the large-scale streamlining and reorganization of the army in 1985, the CMC approved on 3 October 1986 the establishment of Army Aviation as a new People's Liberation Army arm. The first to be established was the Army Aviation Preparatory Command Headquarters with the Army Aviation Administration of the General Staff Department as the main force. After that, the command headquarters transferred many outstanding officers and men from more than 100 Army and Air Force units at and above the division level and deployed some helicopters from the Air Force to form the first Army Aviation preparatory unit in mid-1987. While the preparatory unit was busy undergoing training, the CMC adopted the decision to attach Army Aviation groups (*da dui*) and regiments to various field group armies and to abolish cavalry regiments under group armies.⁴⁹⁰

A key point taken from above is that the creation of the AAC was a result of operational imperatives: to enhance the combat capabilities of the newly-created group armies (*jituan jun*) and the new emphasis at the time (1985) on combined arms warfare. This point is reiterated in an article written by Army Aviation Bureau Director Major General Li Xiyuan for *Hangkong Zhishi* (*Aerospace Knowledge*) shortly after he took over the bureau in 1996.⁴⁹¹

We would expect that the Army Aviation Bureau should have under it several schools and academies. The *DPMP* (1999) identifies one: the Army Aviation Corps Academy in Beijing.⁴⁹²

As a final point of interest, the *Kuang Chiao Ching* article on Army Aviation ascribes to the bureau generic roles and functions that corroborate our general understanding of what the branch bureaus under the SAD are charged to do. "In

⁴⁹⁰ Tseng Hai-tao, "China's Youngest Arm - Army Aviation To Become Major Fighting Force in 21st Century," *Kuang Chiao Ching*, 16 November 1996, in FBIS.

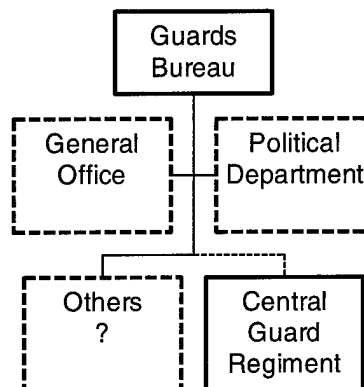
⁴⁹¹ Major General Li Xiyuan, "China's Army Aviation Units," *Hangkong zhishi*, 6 November 1996, in FBIS. As related by General Li, "...so as to raise PLA combat capability on modern war terms, in 1985, along with our million-man troop cutback, the Central Military Commission (CMC) acted with foresight and good timing, resolutely making the historic strategic decision to organize the PLA Army Aviation, and clearly setting forth 'the need to establish the troop unit resolutely.'"

⁴⁹² *DPMP* (1999), p. 204.

accordance with CMC regulations, the Army Aviation Administration of the General Staff Department is directly in charge of Army Aviation equipment allocation, training programs, and personnel training while individual group armies are responsible for combat command and personnel deployment."⁴⁹³ (Note the distinction in roles between the Army Aviation Bureau and Group Armies.)

Guards Bureau (*Jingwei Ju*)

Figure 4.14 GSD Guards Bureau



What little information that was encountered that discusses the GSD Guards Bureau is mainly from the Hong Kong Press and hence, by definition, should be treated with extreme caution.⁴⁹⁴ Moreover, what little one can read about the GSD Guards Bureau is more confusing than informative. So while we can state with a high degree of certainty that there is a Guards Bureau, its internal organization remains unknown.⁴⁹⁵

⁴⁹³ Tseng, "China's Youngest Arm."

⁴⁹⁴ See the following articles. (1) Lu Chia-li, "Yang Dezhong Keeps Body Guards Bureau Under Remote Control," *Kuang chiao ching*, 16 March 1996, in FBIS. Of the articles listed, this author puts the most stock in this one given Kuang Chiao Ching's excellent track record over many years of responsible reporting on PLA issues. (2) Bruce Gilley, "Yang Shangkun Said to Replace Bodyguards," *Eastern Express*, 28 July 1995, in FBIS. While the author of this article, Bruce Gilley, is a responsible and serious journalist, this student is not certain how much stock to put in this paper and this particular article. (3) Li Tzu-ching, "Security Arrangements for 50th Anniversary," *Cheng ming*, 1 May 1999, in FBIS. Cheng Ming is typical of many non-PRC owned Hong Kong periodicals; there is often a grain of truth to the reportage, but it is usually cast in a sensational manner.

⁴⁹⁵ The *DPMP* has carried a GSD Guards Bureau for many years. There is no question about its existence.

We can state with some assurance that the mission of the Guards Bureau is to both plan for and provide for the physical protection and safety of the top CCP and PLA leadership and possibly the physical security of key national military facilities. How exactly the Guards Bureau goes about doing this is also unknown.⁴⁹⁶

From what one can gather, the GSD Guards Bureau does have *operational control* over a unit known as the "Central Guard Regiment." It is likely this Central Guard Regiment that carries out the physical security mission of the GSD Guards Bureau.⁴⁹⁷ We note from the 1999 edition of the *DPMP* that the current Deputy Director of the GSD Guards Bureau (LTG Sun Yong) is also the Commander of the Central Guard Regiment.⁴⁹⁸ However, it is not clear that it would be correct to assume that the Central Guard Regiment is "organic" to the GSD Guards Bureau. Clearly, the GSD Guards Bureau has operational control over the Central Guard Regiment. But it may be the Beijing Garrison Command that has *administrative control* over the regiment.⁴⁹⁹ Therefore, the line to the Central Guard Regiment on the organizational chart above is dashed, not solid.

The Central Guard Regiment *may* also be the same physical security organization that is often referred to as the "8341 Unit." This unit has acquired a notorious aura about it over the years. This is likely the result of its alleged mission of protecting the top party leadership, its role in the arrest of the "Gang of Four" in 1976, but most likely, because it is a "secret" unit and the Hong Kong press loves intrigue.⁵⁰⁰

496 According to Li Tzu-ching, the (current) Director of the Guards Bureau, LTG You Xigui, was a member of an alleged "Leading Group For Security and Safety in the Celebration of the 50th Anniversary" established by the CCP in April 1999 to oversee security for the 50th anniversary of the PRC.

497 Lu "Yang Dezhang" claims that today, "This regiment has now developed beyond the size of a division, with its total number of officers and men exceeding 8,000."

498 *DPMP* (1999), p. 19.

499 According to Gilley, "Overall responsibility for the protection of state leaders lies with the Central Guards Bureau, part of the General Staff Headquarters. The provision of guards, all of them men, and the organisation of day-to-day arrangements is handled by the Central Guards Regiment, part of the Beijing military region of the PLA." Frankly, I do not know if this is correct. Gilley further states that the regiment is responsible for guarding the PRC leadership complex at Zhongnanhai.

500 According to John Pike's Federation of American Scientists (FAS) website (<http://www.fas.org/irp/world/china/pla/8341.htm>):

"The Beijing-based Central Security Regiment, also known as the 8341 Unit, was an important PLA law enforcement element. It was responsible over the years for the personal security of Mao Zedong and other party and state leaders. More than a bodyguard force, it also operated a nationwide intelligence network to uncover plots against Mao or any incipient threat to the leadership. The unit reportedly was deeply involved in undercover activities, discovering electronic listening devices in Mao's office

One last interesting item about the GSD Guards Bureau is worth mentioning. The current Director of the GSD Guards Bureau (LTG You Xigui), is also the Deputy Director of the General Office of the CCP Central Committee.⁵⁰¹ This was also the case with the former GSD Guards Bureau Director, General Yang Dezhong. According to *Kuang Chiao Ching*, the General Office of the CCP Central Committee has a Bodyguards Bureau that may also be part of the mandate of the GSD Guards Bureau Director.⁵⁰² So we have a curious set of interrelationships when looking at the Guards Bureau of the GSD.

First, the Director of the GSD Guards Bureau is concurrently a Deputy Director of a Central Committee organization (the CCP Central Committee General Office) which is a higher level organization than the GSD bureau that he directs. This seems to be a standard practice from the past and not just a current anomaly. Second, the Deputy Director of the GSD Guards Bureau is concurrently the Commander of the Central Guard Regiment. The Central Guard Regiment may be under the operational control of the GSD Guards Bureau but it may also be under the administrative control of the Beijing Garrison, not the GSD per se. Hence, the confusion alluded to in the beginning of this section. These relationships are depicted on the Figure 4.15 below.

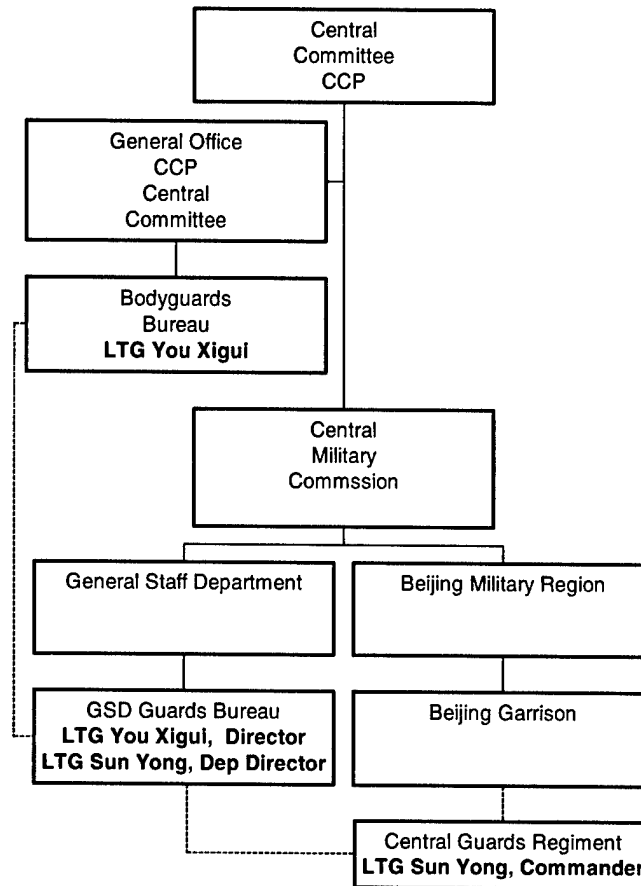
and performing surveillance of his rivals. The 8341 Unit participated in the late 1976 arrest of the Gang of Four, but it was reportedly deactivated soon after the event."

Pike speaks interchangeably about the 8341 Unit and the Central Guard Regiment with more confidence than this student has at this point. In Pike's defense, however, Lu, in *Kuang Chiao Ching* states that, "The Central Bodyguards Regiment is also widely known as the '8341' Troop both at home and abroad, and in the eyes of foreign reporters, it is the 'Palace Guard' of Mao Zedong." However, the Central Guard Regiment has not been deactivated as the FAS website claims.

⁵⁰¹ See *DPMP* (1999), pp. 5, 19.

⁵⁰² Lu, "Yang Dezhong."

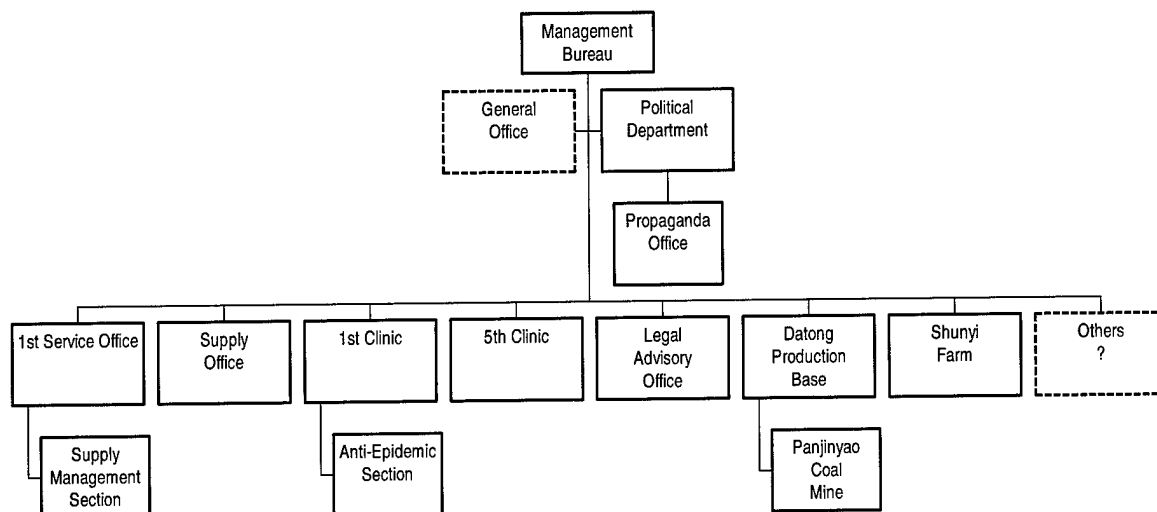
Figure 4.15 Relationship Between GSD Guards Bureau, CCP Central Committee General Office, and Possibly Beijing Garrison Command.



Management Bureau (*Guanli Ju*)

The Management Bureau provides services and support to the General Staff Department, its subordinate organizations, its assigned personnel, and perhaps even dependants. Recalling what we were told about the "General Management Bureau" of the Second Department, the Management Bureau of the GSD likely performs the same functions, that is, "...provides...personnel with logistical support in the form of transportation (cars and buses), office supplies, recreation, and food services." Figure 4.16 below outlines the structure of the bureau:

Figure 4.16 GSD Management Bureau



Clearly, the Management Bureau also provides medical services, given the identification of numbered clinics.

Moreover, the identification of a "Datong Production Base" which includes a coalmine infers that the Management Bureau is (was?) responsible for "off-budget" revenue generating operations that support the operations of the GSD. Whether the GSD Management Bureau is still "in business" after the order to the PLA to divest itself in 1998 is unknown. But it would not be surprising to learn (and we speculate here) that these types of business operations, that likely are for the purpose of troop quality of life and are not morally reprehensible in and of themselves, are still permitted to exist. More than likely, for example, the "Shunyi Farm" was providing food for GSD mess halls, which are themselves likely run and operated by the Management Bureau. 503

So when we think about the Management Bureau we should be imagining all of the motor pools, mechanics and drivers, supply sections and supply officers and NCOs, all of the warehouses, facilities engineers, power plant specialists, mess halls (and cooks),

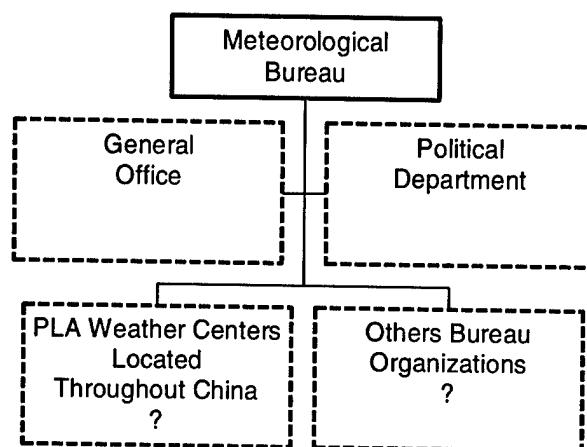
503 We do note that if Management Bureaus in general have the keys to the supply warehouses and the keys to the motor pool, then they may be highly susceptible to unauthorized transactions. Any U.S. officer who has ever served as a supply officer or unit property book officer as an additional duty can imagine the possibilities for malfeasance. Some of this is alluded to in Tong Ruilou and Ren Yanjun "Whole Army Management and Education Scores Marked Results," *Jiefangjun bao*, 15 December 1995.

medical clinics (with doctors and nurses)---everything it takes to keep the GSD running on a day to day basis.

The organization chart above is far from complete.⁵⁰⁴ But what it does offer is enough to verify our sensing so far for the roles of "management bureaus" as generic organizations. We have run into them twice before in this paper: once under the Second Department and again under the Service Arms Department.

Meteorological Bureau (*Qixiang Ju*)

Figure 4.17 GSD Meteorological Bureau



⁵⁰⁴ The basis of this organization chart is the primary source research of Ellis Melvin, who kindly shared the information with this student.

General Office: Notional on the part of this student.

Political Department and subordinate Propaganda Office: *Jiefangjun Shenghuo* (PLA Life), July 1994, pp. 12, 13.

1st Service Office and subordinate Supply Management Section: *Jiefangjun Shenghuo* (PLA Life), July 1994, p. 13.

Supply Office: *Jiefangjun Shenghuo* (PLA Life), July 1994, p. 14.

Legal Advisory Office: *Jiefangjun Bao*, 12 December 1999, p. 3.

Datong Production Base and subordinate Panjinyao Coal Mine: *Jiefangjun Bao*, 31 August 1990.

1st Clinic and subordinate Anti-Epidemic Section: *PLA Health*, Nov-Dec 1994, p. 24.

5th Clinic: *Jiefangjun Bao*, 30 March 1992.

The Meteorological Bureau of the GSD is responsible for providing near-term, mid-term, and long-term weather forecasting for the PLA in support of military operations. Previously thought to be an independent bureau under the GSD, it may have recently been moved under the Operations Department.

Clearly, this is a GSD organization that also has tremendous value-added for the PLA's collateral mission of "supporting national economic construction." Only one article of note provided any insights into this organization, and most of what we learn is from inference.⁵⁰⁵ We come away with the impression that the Meteorological Bureau has at least two key functions: (1) actually providing weather forecasting services for the PLA (and possibly the national government), and (2) working with research institutes to develop meteorological equipment.

In the case of the first function, the Meteorological Bureau apparently mans and operates weather forecasting stations throughout China. While these are likely "fixed" stations, one wonders if the Meteorological Bureau also has airborne or maritime assets, or whether these are PLA Air Force and PLA Navy assets. We do not know at this point.

In the case of the second function, *Renmin ribao* reports that experts from the Meteorological Bureau worked together with the University of Science & Technology for National Defense (part of the "old" COSTIND) in 1997 to develop the "Galaxy-III Computer" for the PLA. Apparently, the 9th Five-Year Plan included a major PLA weather forecasting project and the development of this computer was part of it.

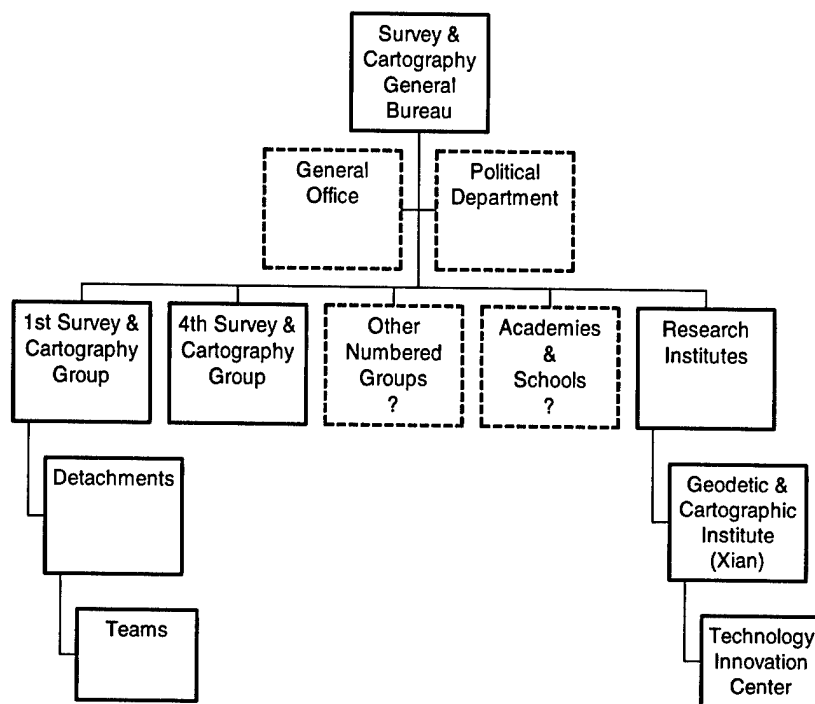
It is unclear if we can even speculate about the Meteorological Bureau having its own academies, schools, or institutes; we have no basis for it at this point.⁵⁰⁶

⁵⁰⁵ Yang Jian and Xi Qixin, "Galaxy-III Giant Computer Used in Army Weather Center," *Renmin ribao*, 5 October 1998, in FBIS.

⁵⁰⁶ We note with interest that in a long article by Major General Liu Jixian of the PLA Academy of Military Sciences highlighting his views of key areas of military science to focus on for the future, he devotes a lengthy passage to the increasing importance of meteorology; especially the effect of weather upon missiles and other "high-tech" systems. See Liu Jixian, "The Military Science Research Mission," *Junshi kexue*, 20 August 1999, in FBIS.

Survey and Cartography General Bureau (*Cehui Zong Ju*)

Figure 4.18 GSD Survey & Cartography General Bureau



Previously thought to be an independent bureau under the GSD, the Survey & Cartography General Bureau, like the Meteorological Bureau, may have recently been placed under the Operations Department of the GSD.

The Survey & Cartography General Bureau (SCGB) of the GSD manages another of the older "branches" of the PLA. The PLA's "surveying and mapping corps" celebrated the 50th anniversary of its founding on 11 May 1950.⁵⁰⁷ The SCGB is responsible for:

- Assigning surveying and mapping missions to its organic units (which are GSD assets),
- Promulgating regulations for the management of PLA survey and mapping activities and units,⁵⁰⁸

⁵⁰⁷ Li Delin and Zhang Dongwen, "Satellite Positioning, Remote Surveying, and Digital Map: China Realizes Historic Stride in Means of Military Surveying and Mapping," *Jiefangjun bao*, 10 May 2000, in FBIS.

⁵⁰⁸ In January 1996 the PLA, under the authority of Jiang Zemin, issued its first-ever "PLA Surveying Regulations." The entire set of regulations consists of 6 chapters

- Issuing circulars to surveying and mapping units on a range of issues that include training, personnel matters, and equipment maintenance,
- Providing oversight to surveying and mapping schools and academies,
- Working with research institutes (its own and others) to identify surveying and cartographic systems requirements to support PLA operations and national (civilian) requirements,
- Fielding surveying and cartographic equipment for the PLA,
- Providing cartographic support to PLA operations; especially to commanders,
- The SCGB apparently must approve, prior to publication, all non-PLA produced maps of China that include more than one province or any map depicting Hong Kong, Taiwan, or Macao,
- The SCGB is also responsible for approving the results of any surveying done by non-PLA PRC government cartographic entities in support of bilateral frontier demarcation talks.⁵⁰⁹

Organic Units. Organic to the SCGB are numbered "Groups," which seem to be regimental size units. The "Groups" are likely further broken down into numbered "Detachments" and then into numbered "Teams."⁵¹⁰ Two Groups were identified, the 1st Survey & Cartography Group and the 4th Survey & Cartography Group.⁵¹¹ There are probably others, but how many remains unknown. In the past, FBIS has translated the names of these units as "Surveying & Mapping Regiments."

One mission of these units is to survey, map, and chart remote areas of China that are difficult to access. Other likely missions of these units could include (and we speculate here) the following:

and 27 articles. Clearly the SCGB was involved in drafting these regulations. See Cao Weifeng and Zhang Dongwen, "Central Military Commission Chairman Jiang Zemin Signs Order Promulgating 'The Chinese People's Liberation Army Surveying Regulations'," *Jiefangjun Bao*, 19 January 1996, in FBIS.

⁵⁰⁹ The last two bullets are derived from a Hong Kong article explaining the 1996 PLA Military Surveying Regulations. See Didi Kirsten Tatlow, "Cartography Law Laid Down on Map Vetting," *Eastern Express*, 1 February 1996, in FBIS. Bullets without footnotes are derived from several *Jiefangjun Bao* and Xinhua articles that discuss the SCGB and which are specifically cited within the remainder of this section of the paper.

⁵¹⁰ See Ma Xiaochun, "General Staff Headquarters Holds Report Meeting on Deeds of Heroes and Models," *Xinhua*, 22 March 2000, in FBIS.

⁵¹¹ Ellis Melvin found references to the 1st Survey & Cartography Group in the 24 June 1989 and 15 July 1989 editions of *Jiefangjun Bao*. He found reference to the 4th Survey & Cartography Group in the 11 August 1990 edition of *Jiefangjun Bao*.

- Support to demarcation agreements between China and bordering nations such as Russia, the Central Asian nations, and Vietnam, and
- Tactical cartographic support to PLA field operations as needed.⁵¹²

The 1st Survey & Cartography Group was awarded the title "Heroic Surveying and Mapping Regiment" (FBIS terminology) by the Central Military Commission. It is sometimes mentioned by the top PLA leadership in inspirational talks. For example, Chief of the General Staff Fu Quanyou referred to this unit in a 1997 *Jiefangjun Bao* article published under his name entitled, "Always Persist In Carrying Forward The Spirit Of Plain Living And Hard Struggle." His comments tell us a little bit about the conditions under which some of these unit operate:

The First Surveying and Mapping Regiment of the General Staff Department which has been awarded the honorable title, "Heroic Surveying and Mapping Regiment" by the Central Military Commission works in small units in the wilderness year round, going up to the snowy fields on high mountains and into the Gobi Desert and prohibited areas in northern Tibet. They have gone through all kinds of hardships, overcome many unimaginable difficulties, and filled empty gaps in surveying and mapping work in our country. Their deeds fully embody the characteristics of plain living and hard struggle.⁵¹³

Academies & Schools. Prior to the 1999 military academy reorganization and consolidation, the SCGB had at least one academy associated with it that we know of: the PLA Survey & Mapping College. However, as of July 1999 this college was absorbed into the newly created PLA Information Engineering University.⁵¹⁴ It is likely that the SCGB has other academies, but no data was available to confirm this. However, one *Jiefangjun Bao* article on new surveying regulations mentions in passing that the regulations apply to all "surveying units, academies, and schools" leaving the impression that there are many such institutions under the SCGB.⁵¹⁵

Research Institutes. In a May 2000 *Jiefangjun Bao* interview, the Director of the SCGB (Li Zhiguang, probably a major general) mentioned that the SCGB has been engaged in the development of a good deal of surveying and cartographic equipment over the years (over 400 major projects "in recent years").

One gets the impression that this bureau has quite a few research and development institutes associated with it. Whether these institutes have transferred to the GAD is unknown. During the course of research for this paper only one institute was identified:

⁵¹² We note that these units have vehicles that were recently fitted with satellite Global Positioning Devices. See "Military Vehicles in Hong Kong, Macao Installed With GPS," *Shanxi Ribao*, 7 April 2000, in FBIS.

⁵¹³ Fu Quanyou, "Always Persist In Carrying Forward The Spirit Of Plain Living And Hard Struggle," *Jiefangjun Bao*, 31 July 1997, in FBIS.

⁵¹⁴ Ma Xiaochun, "PLA Sets Up Four New Academies," *Xinhua*, 2 July 1999, in FBIS; and, "PLA Establishes New Military Schools Per Jiang Decree," *Xinhua* 2 July 1999, in FBIS.

⁵¹⁵ Cao Wenfeng and Zhang Dongwen, *ibid.*

the PLA Geodetic and Cartographic Institute in Xian and its associated (subordinate) Technology Innovation Center (established in June 2000).⁵¹⁶

In any event, the SCGB claims to be at the cutting edge of high-tech in the PLA. The list below, derived from the Chinese press, is some of what the PLA claims it has developed by way of surveying and mapping systems in recent years. If any of this is correct (and we cannot know for sure), then the SCGB ought to be viewed as leading one of the more advanced pockets of technology in the PLA, and not just the headquarters for "plain living" surveying units slogging across the snows of Tibet. Examples include:

- Three dimensional topographic simulation system to assist commanders in planning operations,⁵¹⁷
- "Satellite positioning technologies,"⁵¹⁸
- "Aerospace telemetry systems" to provide precise coordinates for precision strike weapons,⁵¹⁹
- Digital mapping systems on 3D displays for PLA C3I systems,⁵²⁰
- Remote surveying systems,⁵²¹
- GPS-equipped vehicles with digital mapping capabilities for employment in the field,⁵²²

⁵¹⁶ "PRC's Military Establishes Technology Innovation Center," *Xinhua*, 2 June 2000, in FBIS.

⁵¹⁷ "PLA Modernizes Surveying, Mapping Technology," *Xinhua*, 14 October 1999, in FBIS.

⁵¹⁸ Ibid.

⁵¹⁹ Xu Chengtai and Zhang Dongwen, "PLA Mapping and Cartography Support Becomes More Modern With Each Passing Day," *Jiefangjun bao*, 17 May 1995, in FBIS.

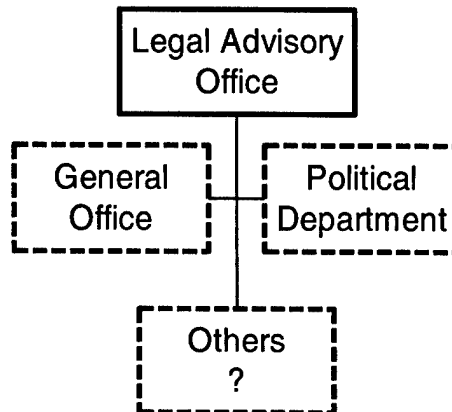
⁵²⁰ Ibid.

⁵²¹ Ma Xiaochun, "Fu Quanyou Stresses Need To Accelerate Modernization of Military Survey and Mapping," *Xinhua*, 15 May 2000, in FBIS.

⁵²² Ibid.

Legal Advisory Office (*Falu Guwen Chu*)

Figure 4.19 GSD Legal Affairs Office



The last time the *DPMP* carried this office was in the 1997 edition. Therefore, we are not sure that it is still a separate office under the GSD. However, China's July 1998 defense "White Paper" (*China's National Defense*) devoted three pages to "Military Legislative Work." Given the emphasis in the PLA over the past few years on the promulgation of regulations and standardized administrative procedures it is likely, then, that some legal affairs office still exists in the GSD.

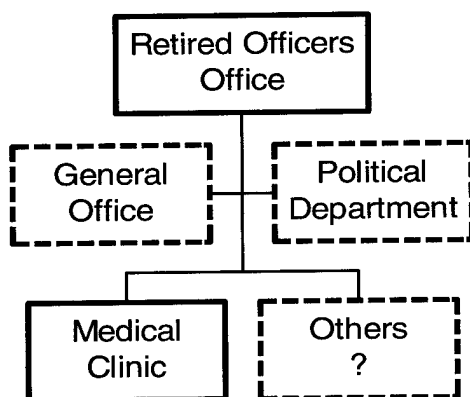
Clearly, many of the regulations that have been promulgated have a direct impact on the daily work of various GSD's sub-organizations. For example, the "Regulations on Conscription Work" and "Regulations on Militia Work" undoubtedly have a direct impact on the GSD's Mobilization Department. Likewise, the "Regulations of the PLA Headquarters" should have an impact on the entire GSD.

Moreover, although many of these regulations are issued under the authority of the CMC, most are likely drafted and developed by the pertinent sub-organizations of the GSD. Consequently, some type of legal office is needed to coordinate with the various sub-organizations of the GSD that are involved, as well as to coordinate with the legal offices in other national-level PLA organizations,⁵²³ and perhaps with the Ministry of National Defense, or even the appropriate committees of the National People's Congress.

⁵²³ The *DPMP* (1999) lists the CMC as currently having a Legal Affairs Bureau.

Retired Officers Office (*Xiuguan Chu*)

Figure 4.20 GSD Retired Officers Office



The GSD's Retired Officers Office is located at A-1, Huayuan Road in the Haidian District of Beijing. Its apparent function is to provide services to retired PLA officers such as medical services as indicated by the fact that it has at least one subordinate medical clinic. One could imagine that the office would also assist retirees with pension assistance, and whatever other "perks" are authorized to retired career PLA officers. What is not clear is if this office's sole function is to provide services to local retirees, or, if its mission is actually to manage retirement services for the entire PLA by setting policy, providing oversight, etcetera.⁵²⁴

OBSERVATIONS AND CLOSING COMMENTS

As stated at the start of this paper this effort is a beginning, not an end, to our understanding of the GSD. There are many, many data gaps in seemingly basic areas that remain. Some of this basic information may be revealed over time. As the PLA marches toward increased "regularization" their own publications will likely provide more insights. But many of the gaps probably never will be filled given the closed nature of the Chinese system. Moreover, some of the speculation in this paper and some of the interpretations of roles, missions, organizations, and relationships offered may ultimately prove incorrect. This is to be expected, and critical commentary is welcomed.

But having gone through this exercise one still comes away with some "feel" for the GSD. So in closing, some final observations and comments are in order:

⁵²⁴ Ellis Melvin found the citation for this office, its address, and the existence of at least one medical clinic in *PLA Life*, December 1998, p. 59.

- The first thing one walks away with is a sense of the enormity of this organization. The GSD is a big organization! Even if we cannot put a number on its assigned strength we can "feel" its size. Alternately stated, we know we have put our arms around an elephant. We just do not know precisely how large an elephant it actually is.
- Second, we take note of the fact that the GSD is not just the staff officers at headquarters in Beijing, but the officers and soldiers in field units that are organic to the GSD and that are stationed all over China. To recapitulate, the following GSD sub-organizations have (or likely have) organic units stationed across the entire country:
 - The Third Department
 - The Communications Department
 - The Engineer Bureau of the Service Arms Department
 - Possibly the Anti-Chemical Warfare Bureau of the Service Arms Department,
 - Possibly the Aviation Bureau of the Service Arms Department
 - Probably the Electronic Countermeasures & Radar Department,
 - The Surveying & Cartography General Bureau
 - Probably the Meteorological Bureau
 - Probably the Central Guards Bureau (Beijing only)
- Third, we come away with an understanding of the pervasive role of the GSD in almost every aspect of running the PLA as a professional military force. Indeed, one should come to view the GSD as one of the centers---one of the core organizations---that has been working to make the PLA an increasingly professional and increasingly competent military organization over the past decades; certainly since Deng Xiaoping's "strategic decision" in 1985. Many of the modernization programs the PLA is undergoing (or may undergo in the future) are being (or will be) managed by some organization within the GSD.
- Fourth, although the PLA continues to become more competent and more professional, it would be a mistake to view this trend as taking place at the expense of the influence of the CCP. The Party's presence in the GSD continues to be pervasive through the various party committees and a personnel system that is still run by the Political Commissars. The same can likely be said for the entire PLA, not just the GSD. Students and observers can argue back and forth about the role of the CCP today in the life of the general citizenry or how viable it is within certain sectors of the Chinese polity. But within the PLA the Party still appears to be a force to be reckoned with. It may not be too much of an overstatement to suggest that today the PLA is the one Chinese government organ over which the Party still has control throughout the entire country.
- Fifth, one is struck by how much organizational continuity there has been in the GSD since 1949. There have not been all that many major changes to the GSD organization. Some departments have been merged; others have been abolished or moved over to other parts of the PLA national establishment. But for the most part,

the GSD today would be very recognizable to a PLA staff officer who served in the GSD in 1949. In other words, there have been many organizational changes and adjustments, but seemingly few *systemic* changes.

- But sixth, there is some evidence to suggest that the changes that have been made over the past decade or so have been a reflection of adjusting organizational structure for mostly operational reasons. Examples include the creation of the Army Aviation Corps (1985), the creations of the Electronic Countermeasures & Radar Department (1990) and probably the creation of the Service Arms Department (1993). Along with many of the recent reforms in PLA-wide programs such as in professional military education, the creation of a NCO system, and the new obsession with regulations and standardization, one is led to believe that, overall, the GSD appears to be a "learning organization."
- Seventh, we note that the GSD remains an organization dominated by officers of the Ground Forces. One could easily walk away with the impression that all that is going on within the GSD goes on almost exclusively for the Ground Forces. This is clearly not the case. Yet, there is little "sense" or "feel" that the GSD is servicing the needs of the PLAAF of the PLAN. This may be a very mistaken impression on the part of this student. It may be that the service headquarters are doing much of the heavy lifting on air force and navy reform. But because of the subordinate status of the service headquarters to the GSD one wonders how much the PLAN and PLAAF can accomplish without one of their own in any of the key positions of the GSD leadership. This is a critical issue for the PLA---or it should be. For the first time since 1949 the PLA's own concepts of operation and their own threat assessments now allow one to ask the question: "how relevant are the ground forces to China's security?" If in fact the PLA aspires to some fashion of joint warfare as some of its literature suggests, then it is going to have to see the dawn of a day when PLAN and PLAAF flag officers attain leading positions in the GSD. So far, this has not happened.
- Eighth, we take note of the incredible number of regulations that have been promulgated for the entire PLA by the GSD over the past decade. This is a major indicator of increasing professionalism and competency. However, it begs this very critical question: "If there were no regulations or standardized policies in the past, then how did the PLA operate?" In other words, without PLA-wide standards and procedures one could wonder if, systemically speaking, there have been many PLA's, as opposed to a single PLA.
- Ninth, we note that systemic change takes a long time in the PLA. Whether it was the creation of the Group Armies in 1985, the bureaucratic steps needed to create the Army Aviation Corp, incorporating new operational concepts, or the long lead time one senses it took to enact the current round of PME reform, change takes time. From the study at hand we suspect that systemic change in the PLA goes through as many as nine phases:

- (1) Research and "theoretical work"
 - (2) Experimentation with concepts (experimental units, FTXs, experimental organizations)
 - (3) Adjustments to theory
 - (4) The limited establishment of prototypes in the field
 - (5) The promulgation of regulations (or directives) for the entire PLA
 - (6) Study of the regulations (or directives) by the greater PLA
 - (7) Execution
 - (8) Inspection for compliance
 - (9) The declaration of "success"
- Finally, we point out that the GSD represents what we might term "the contradiction that is the PLA." On the one hand, we have a massive organization that is grappling with some very basic military issues that leave us with the impression that the PLA is an extremely large but not very sophisticated force. How else to explain a lack of standardization? How else to explain a reliance on local militias? What else to make of the lack, hitherto, of a professional corps of Non Commissioned Officers? But at the same time, the GSD also represents the fact that there are, to borrow Lin Chong-pin's term, "pockets of excellence" in this military establishment that augur well for its ability to become a highly modern force. For example, within the GSD we find organizations that are likely on the cutting edge of high technology within China itself. The (Communications) Department comes to mind. So too does the Third (Sigint) Department and the Fourth Electronic Countermeasures & Radar Department). These organizations and the programs they now manage and will institute in the future have the potential to change at least some parts of the PLA in ways that we may find surprising.

4. THE GENERAL POLITICAL DEPARTMENT AND THE EVOLUTION OF THE POLITICAL COMMISSAR SYSTEM

By Larry Wortzel⁵²⁵

Since the Gutian Conference of December 28, 1929, the system of communist party leadership and education has been an important institution within units of the Chinese People's Liberation Army (PLA).⁵²⁶ Prior to the Gutian Conference, soldiers' committees in units were designed to give rank in file troops a chance to have a voice in their own affairs.⁵²⁷ It was at that conference that Mao Zedong managed to abolish the soldiers' committees. Mao argued for the establishment of a party branch system at the company level of the PLA, giving ordinary soldiers a representative of the CCP in their midst. This served three purposes: it provided the communist party a means to sample and monitor opinion in units; it provided a means to influence soldiers and leaders, organizing them and spreading the communist line; and it provided a visible presence of what the CCP calls the system of "people's representatives." Mao's allies in establishing the political commissar system at the Gutian meeting were Zhou Enlai and Deng Xiaoping.

In attempting to establish the party branch system and political commissars, Mao faced objections from field commanders like Peng Dehuai, Chen Yi, Zhu De, and even Lin Biao, who favored a structured, professional military with traditional training.⁵²⁸ It

⁵²⁵ Larry M. Wortzel is Asian Studies Director at The Heritage Foundation, an influential private, conservative think tank in Washington, D.C. He served in the U.S. military for 32 years, retiring as an Army colonel. He is a Ranger and Parachutist who spent the early part of his career in infantry units before becoming a military intelligence officer. He earned a Ph.D. in political science at the University of Hawaii and is a graduate of the Armed Forces Staff College and the Army War College. He has been a strategist for the Army and his last position before retiring and joining The Heritage Foundation was director of the Strategic Studies Institute at the U.S. Army War College. Dr. Wortzel has written or edited five books and has contributed numerous articles to academic and policy journals.

⁵²⁶ Ge Guangzhi, ed., *Hui yi cidian* [A Dictionary of Meetings] Beijing: Falu Chubanshe, 1991, p. 341.

⁵²⁷ William W. Whitson with Chen-Hsia Huang, *The Chinese High Command: A History of Communist Military Politics, 1927-71*, New York: Praeger Publishers, 1973, p. 52.

⁵²⁸ Mao Zedong, "On Correcting Mistaken Ideas in the Party," *Selected Works*, vol. 1, Beijing: Foreign Languages Press, 1975, pp. 105-16; Huang Xiaohui, et al, eds., *Sixiang zhengzhi gongzuo 70 nian* [70 Years Of Political Thought Work], Beijing,

was an argument that Mao won. Thus, from the time of the Gutian Conference to today, political affairs and education, along with personnel, security and discipline, have been the purview of the Political Commissar (PC) system.⁵²⁹ There have been some loops and diversions in this policy. From 1967-1969, PLA Cultural Revolution Groups took over ideological functions in the PLA.⁵³⁰ During this period PLA Revolutionary Committees replaced the Party Branch and Political Commissar systems in a functional sense.⁵³¹ The GPD was reconstituted in 1969 with Li Desheng as its director, but with what Shambaugh describes as a "skeleton staff" of 200.⁵³² Today, however, the Political Commissar system continues to be the way that the Chinese Communist Party (CCP) retains its control over the military and shapes the articulation of the party line. At the same time, the Party Branch system remains the basis of "people's democracy," and military representatives form a constituency in the *Renmin Daibiao Dahui*. Alexander George's excellent explanation of the dual function (political education and "people's democracy") in *The Chinese Communist Army in Action* explains the way that the political commissars ensured that even below the regimental level party branches were established at basic echelons of the PLA and a communist party recruiting system functioned effectively.⁵³³ George's paradigm remains the model today.⁵³⁴

As long as the People's Liberation Army remains and organ of the Chinese Communist Party instead of the state, and until there are other real political parties in

Guofang Daxue Chubanshe, 1991, pp. 145-157; and Larry M. Wortzel, *Dictionary of Contemporary Chinese Military History*, Westport, CT: Greenwood Press, 1999, pp. 106-8.

529 The political commissar system functions at a series of levels. At the company level, a "political instructor" (*zhengzhi zhidaoyuan*) acts as a leader equal to the company commander. At the battalion level a "political director" (*zhengzhi*) functions as the counterpart of the battalion commander. At regimental and higher levels of the PLA "political commissars" (*zhengzhi weiyuan*) and "assistant political commissars" (*zhengzhi xieliyuan*) oversee party work. General Political Department, *Zhongguo Renmin Jiefangjun zhengzhi gongzuo tiaoli* [Regulations Governing Political Work in the Chinese People's Liberation Army], Taipei: Ministry of National Defense General Political Warfare Department, 1965, pp. 16-16, 30-41, 77-78.

530 Harvey W. Nelson, *The Chinese Military System: An Organizational Study of the People's Liberation Army*, Boulder, CO: Westview Press, 1981, pp. 102-103.

531 This period is described in David Shambaugh, "The Soldier and the State in China: The Political Work System in the People's Liberation Army," *The China Quarterly*, 1991, pp. 530-533, 540-541.

532 Ibid., p. 541.

533 Alexander L. George, *The Chinese Communist Army in Action: The Korean War and its Aftermath*, New York: Columbia University Press, 1967, pp. 25-55.

534 See especially pages 46 and 47 of George, *The Chinese Communist Army in Action*.

China, the PC system will remain an important institution.⁵³⁵ Nonetheless, the role of the PC system, and its management in the General Political Department, has evolved since 1929. This paper is an attempt to understand that evolution and to forecast its future direction. Of course, the absence or presence of the system of political commissars and the General Political Department is of little consequence in and of itself. The real issue at the heart of this inquiry, and in the minds of western military thinkers, is whether the political commissar system in the PLA is a hindrance or help in maintaining a professional Army. This paper will argue that it is both, and perhaps more of help than a hindrance today. It is most likely, however, that the evolution of political life in China, and the reflection of that evolution within the PLA will change the role of the GPD.

From the time of the Gutian Conference, the political commissar system “became the institutional expression of the Maoist concept that the joint exercise of authority by commissars and commanders would ensure that military operations were directed toward appropriate political objectives.”⁵³⁶ PLA histories refer to political work systems within the military from the time of the Nanchang Uprising (August 1, 1927).⁵³⁷ But it was after the Gutian Conference that “under Mao Zedong’s guidance the (communist) party formally established the political commissar system.”⁵³⁸ And with the system of political commissars came the party branches as instruments of “people’s democracy” in military units. In March 1930, the CCP Politburo decided to establish the Central Military Commission and to place under its control the “General Political Bureau” (*Zong Zhengzhi Ju*).⁵³⁹ The organization was essentially ineffective when first established, however. After a short time, in 1931, in ‘General Order Number Six,’ the CMC elevated the level of the organization and established a formal PLA department, the General Political Department, to manage the PC system.⁵⁴⁰ Mao Zedong’s views of how the political

⁵³⁵ The experience of the Republic of China is instructive here. The Guomindang (Nationalist Party) is structured as a Leninist party, just like the CCP. When opposition parties were legitimized and free elections were permitted in Taiwan, one of the first challenges the ROC had to face was to dismantle the political commissar system in its own military (and party branches in the entire government). See Arthur Shu-fan Ding and Alexander Chieh-cheng Huang, “Taiwan’s Military in the 21st Century: Redefinition and Reorganization,” in Larry M. Wortzel, ed., *The Chinese Armed Forces in the 21st Century*, Carlisle, PA: Strategic Studies Institute, 1999, pp. 253-288.

⁵³⁶ Whitson with Huang, *The Chinese High Command*, p. 527.

⁵³⁷ Yan Shijin, *Dang dui jundui zhengzhi lingdao zhengci yu shijian* [Policy and Practice in the Party’s Leadership of Army Political Work], Beijing: Military Science Press, 1993, p. 37.

⁵³⁸ Ibid., pp. 37, 39.

⁵³⁹ Zhang Aiping, Zhang Zhen, Yu Hao, et al, *Dangdai Zhongguo congshu: Zhongguo Renmin Jiefang Jun* [Collection on Contemporary China: The Chinese People’s Liberation Army], Beijing: Contemporary China Press, 1994, p. 355.

⁵⁴⁰ Ibid., See also Huang, *Sixiang zhengzhi gongzuo*, pp. 145-226.

commissar system should function, and even whether there should be one, were not always accepted by either professional military officers or by CCP leaders. Wang Ming, for example, is cited as criticizing the political commissar system as "the ideology of the Party trying to run everything" (*dang di baoban zhuyi*).⁵⁴¹ At the Ningdu Conference of 1932, while the PLA was still in its formative stages, Mao came under attack "from commanders and senior party administrators alike for his 'adventurism, guerrillaism (a preference for irregular formations and tactics over conventional maneuver warfare), and escapism' (attempting to escape from rather than defend the communist base from the Nationalists during the Fourth Encirclement Campaign)." ⁵⁴² This was a way for some of the more traditionally oriented military officers to criticize the way that, in their view, leadership had been taken away from the commander and put in the hands of the political commissar. Among those who sought to redefine the role of the political commissar and the PC's relationship to the commander differently from Mao were Zhou Enlai and Peng Dehuai. Zhou and Peng stressed the need for a clearer set of dual lines of specialization among commanders and commissars, adhering more closely to Soviet Army lines (this despite the fact that Zhou was originally Mao's ally in establishing the system at Gutian).⁵⁴³ In their view, political commissars were to function more as administrators responsible for specific party matters than as co-commanders of combat units. Mao argued strongly for the co-commander role and the dual leadership structure of the PLA (commander and political commissar).

At the Ningdu Conference, held in mid-October 1932 in the town of Ningdu, Jiangxi Province, the criticism of Mao Zedong and his emphasis on small-unit dispersion and peasant based guerrilla operations reached its nadir. While this was primarily a doctrinal and tactical argument, it also increased criticism within the CCP of Mao's vision for the political commissar system. After the Nationalist Third Encirclement Campaign, where Communist forces achieved modest successes through conventional operations, the Ningdu Conference decisions began a period in the People's Liberation Army's (PLA) history where conventional, mobile warfare was the principal tactic emphasized by PLA leaders. Although the PLA continued to use guerrilla operations to a lesser extent than that advocated by Mao Zedong, and relied on the peasantry as a base of popular support for logistic activities, the focus of Communist military leaders shifted in favor of maneuver warfare. More importantly from the standpoint of this study, Mao was relieved of leadership positions at the conference and the views of those PLA leaders who sought a reduced role in combat units for the political commissar prevailed.

After the Ningdu Conference, Zhou Enlai replaced Mao as the political commissar of the Red Army, Mao was expelled from all of his posts, and many of Mao's supporters were also expelled or persecuted. Xiao Jingguang, for instance, was removed from his

⁵⁴¹ Yan, *Dang dui jundui zhengzhi lingdao*, p. 37.

⁵⁴² Whitson, *The Chinese High Command*, pp. 527-28.

⁵⁴³ Ibid., p. 528.

Party positions and sentenced to five years in prison by Zhou Enlai.⁵⁴⁴ Lin Biao, a traditional Mao ally, may have temporarily abandoned Mao at this juncture, since Lin was given command of a corps after the conference.⁵⁴⁵

BACKGROUND ON THE GENERAL POLITICAL DEPARTMENT

The CCP always seems to have had some concerns that the military would remain an organ of the party.⁵⁴⁶ To remedy these concerns, in 1931, in order to ensure that the military forces stayed "red" the General Political Department (GPD) was created.⁵⁴⁷ A model for the creation of the GPD and the role of political commissars was the party representative system in the Soviet Union, which was instilled in the party leadership of both the Chinese Communist Party and the Nationalist Party as an important means to ensure party loyalty within the military at the Whampoa Military Academy by Soviet advisers.⁵⁴⁸ William Whitson believes that another reason that the CCP created the GPD was to ensure that some system was in place to "measure" just how committed a communist each soldier and commander was.⁵⁴⁹ That view is still prevalent among many military leaders today. Li Jijun, who was the Director of the General Office of the CCP Central Military Commission, served as a division and group army commander, and was deputy commandant of the Academy of Military Science makes this point when he writes that:

"In one form or another, every nation has some form of political work organ to conduct propaganda and political thought work in units.... The movement and orientation of the entire People's Liberation Army is the orientation of the political thought work done in the military. Political work in the military and the military's basic mission are inseparable. Political work doesn't exist for itself, but to facilitate the accomplishment of the military's mission...the checking and inspecting of cadre, training, legal norms, and discipline are all major functions of political work."⁵⁵⁰

544 Xiao Zhaoran, *Zhonggong dangshi ming cidian* [A Concise Dictionary of the Chinese Communist Party's History], Beijing: Jiefangjun chubanshe, 1986, pp. 399-403.

545 Whitson, *The Chinese High Command*, pp. 405-406, 546-550; see also Laszlo Ladany, *The Communist Party of China and Marxism, 1921-1985: A Self-Portrait*, Stanford: Hoover Institution Press, 1988.

546 Whitson with Huang, *The Chinese High Command*, p. 452.

547 Zhang Zhen, et al. *Zhongguo Renmin Jiefang Jun*, pp. 354-356.

548 Ibid., p. 600-601, ff. 1, 4. See also Raymond L. Garthoff, *Soviet Military Doctrine*, Glencoe, IL: The Free Press, 1953, pp. 25-28, 223-253; John Erickson, *The Soviet High Command, 1918-1941*, London: Macmillan and Co., 1962, p. 133.

549 Whitson, *The Chinese High Command*, p. 453.

550 Li Jijun, "Budui sixiang gongzuo de renwu yu fangfa" [The Mission and Methods of Military Ideological Work] in Li Jijun, *Junshi lilun yu zhanzheng shijian* [Military Theory and Combat Practice], Beijing: Military Science Press, 1994, pp. 195, 196.

Li's thinking is consistent with his former position in Deng Xiaoping's Central Military Commission General Office. It is instructive to note, however, that Li Jijun was consistently a combat commander. He was a division commander in the 24th Group Army and he led the 38th Group Army. Yet he had no reservations as a committed communist party member to the dual command system.⁵⁵¹ Another experienced combat leader in the PLA, Lieutenant General Kui Fulin, who served in division, group army, and military region commander positions, agrees with Li's position.

The Zunyi Conference (January 6-8, 1935), conducted on the Long March, is perhaps one of the seminal events in PLA history. It is also significant because by the end of the conference Mao Zedong gained the leadership of the Chinese Communist Party's (CCP) Central Military Commission (CMC). Zunyi was an enlarged meeting of the Politburo of the CCP. The meeting took the name of the location where it was held, a town in Guizhou Province. Zhou Enlai was relieved of his post as chairman of the CMC at the meeting and replaced by Mao. Qin Bangxian (who is also known by his party name Bo Gu), the CCP Secretary General, was removed from that post and appointed director of the General Political Department of the Red Army.⁵⁵²

It was not until the CCP and the Red Army had to flee the base areas and undertake the Long March that the decisions of the Ningdu Conference were modified. Mao was restored to leadership positions at the Zunyi Conference. The debate within the PLA over the extent to which emphasis should be placed on guerrilla tactics versus conventional tactics paralleled the discussions over the role of the Communist Party's political commissars within units. For the most part, those who advocated more conventional military tactics and maneuver warfare in battlefield formations also advocated the primacy of the field commander over the political commissar. But there was compromise on the issues. Peng Dehuai, who was critical of guerrilla tactics, and therefore Mao's ideas, emerged as a strong commander, Zhou Enlai was relieved of his post as chairman of the Central Military Commission (a repudiation of the reduced role for political commissars⁵⁵³) and replaced by Mao Zedong, and Mao was concurrently elected into the Politburo standing committee.⁵⁵⁴ A key decision of the Zunyi Conference was to eliminate in some organizations the division level within the PLA, replacing it regimental and brigade organizations. More cadres (political department officers) were sent into these formations.

The debate over the placement of political commissars within PLA units and their roles, which started at the Gutian Conference in 1929, came to a head at the Ningdu Conference, and was, to a certain extent reversed at the Zunyi Conference. Nonetheless, the tension between guerrilla warfare and conventional warfare is a major doctrinal

⁵⁵¹ Author interview of LTG Li Jijun, August 1997, Fort Monroe, VA.

⁵⁵² Warren Kuo, *Analytical History of the Chinese Communist Party, Volume III*, Taipei: Institute for International Relations, 1970, pp. 16-27.

⁵⁵³ Larry M. Wortzel, *Dictionary of Contemporary Chinese Military History*, Westport, CT: Greenwood Press, pp. 306, 308.

⁵⁵⁴ Kuo, *Analytical History of the Chinese Communist Party*, pp. 24-27.

conflict in the PLA even today, and this tension is reflected in a parallel discussion within the PLA about the proper role for the political commissar system and the General Political Department in a professional army.⁵⁵⁵

Although the General Political Department was abolished for a time during the Anti-Japanese War (World War Two) at the request of the Nationalist government as a means to maintain the United Front, it was reestablished in 1946. And despite the temporary abandonment of a General Political Department, the system of political commissars and political education remained a basic element of PLA organization and life.⁵⁵⁶

After 1949, there were five general departments created in the PLA, all functioning under the Central Military Commission, the: 1) General Staff Department, 2) General Political Department, 3) General Cadre Administration Department, 4) General Logistics Department, and 5) General Financial Affairs Department.⁵⁵⁷ The GPD in 1950 consisted of an organization department (*Zuzhi Bu*), a propaganda department (*Xuanquan Bu*), a security work department (*Baowei Bu*), a cultural department (*Wenhua Bu*), a youth work department (*Qingnian Bu*), and a system of secretary-generals assigned around the PLA (*Mishuzhang Xitong*).⁵⁵⁸

The scope of the GPD was expanded after a 1957-1958 effort to reduce the bureaucracy in the military and the number of General Departments, to include the previously separate PLA General Cadre Administration Department, the military procurate system (*Junshi Jiancha Yuan*), and the military court system (*Junshi Fa Yuan*).⁵⁵⁹ Within the GPD, the Youth Work Department and the Organization Department were combined, as were the Cultural Department and the Propaganda Department. Thus, the GPD of 1958 had seven sub-departments, the: organization department, cadre department, propaganda department, security work department, liaison department, mass work department, and the system of general secretaries.⁵⁶⁰

The system of general secretaries (*mishuzhang xitong*) is worth a more complete description. It is probably the most important system in the PLA, and perhaps in the Communist Party. Its major function is to ensure that sensitive, inner party documents and decisions are handled in a discrete (even secret) and expeditious manner. At the

⁵⁵⁵ Michael Pillsbury, "PLA Capabilities in the 21st Century: How Does China Assess its Future Needs," in Larry M. Wortzel, ed., *The Chinese Armed Forces in the 21st Century*, Carlisle, PA: Strategic Studies Institute, 1999, pp. 89-158.

⁵⁵⁶ Huang Xiaohui, *Sixiang zhengzhi gongzuo*, pp. 226-241.

⁵⁵⁷ Chiang I-shan, *Chung-kung chun-shih wen-chien hui-pien* [Source Book on Communist Chinese Military Affairs], Hong Kong: Union Research Institute, 1965, p. 837.

⁵⁵⁸ Zhang Aiping, *Zhongguo Renmin Jiefang Jun*, p. 357.

⁵⁵⁹ Ibid., p. 356. See also Xin Ming, ed., *Zhongguo Renmin Jiefang Jun junguan shouce: kongjun fenci* [Chinese People's Liberation Army Officers' Handbook: Air Force Volume], Beijing: Qingdao Press, 1991.

⁵⁶⁰ Zhang Aiping, *Zhongguo Renmin Jiefang Jun*, p. 356.

senior leadership levels in the PLA, the GPD sends out a centrally controlled group of cadres, the "secretaries-general," who manage and coordinate the most critical and controlled inner party documents and communications.⁵⁶¹ This important function ensures the rapid and secret coordination and approval or modification of major inner-party documents and decisions.

In the early days of the PLA, the system was actually a division of the GPD, and under careful GPD control. The system proved to be very effective, and today appears to have been institutionalized as the way that the CCP does its inner-party business. From all accounts by communist party members in the PLA, decisions and the coordination of major policy positions in the PLA are now part of an institutionalized mechanism within the CCP. The communist party can thus be assured that senior leaders are able to communicate and shape new or important ideas through carefully placed, trusted people in major offices.

The GPD Functions Suspended

At the height of the Cultural Revolution, the work of the GPD was suspended or transferred to some of the revolutionary committees within the PLA.⁵⁶² The PLA Cultural Revolution Groups attacked in sequence one after another of the senior PLA leaders associated with Peng Dehuai and emphasis on a military whose mark of excellence was battlefield performance and not political rectitude. But by 1969, the PD was restored to its former role and comprised the: organization department, cadre department, propaganda department, security work department, mass work department, and general office. Its total size at that time was limited to 200 people.⁵⁶³ The cultural department and liaison department were once more added to the GPD in 1975. The military procurate and court functions were also restored to the GPD following the normalization of political affairs in the country after the death of Mao Zedong and the arrest of the Gang of Four. After the removal of Cultural Revolution and Anti-Rightist Movement-related labels from older cadre and the consolidation of Deng Xiaoping's power (the 3rd Plenum, 11th Central Committee), the GPD was comprised of twelve departments and has remained relatively consistent in its structure.⁵⁶⁴ Figure 5.1 shows the GPD structure today.

⁵⁶¹ The author relies here on discussions with senior officers of the general office of the GDP.

⁵⁶² On this matter, it is worth noting that a major series of political commissar training lectures simply ends during the Cultural Revolution and takes up after its end. See Liang Biye, *Jundui zhangzhi gongzuo de xuexi yu shijian* [The Study and Practice of Army Political Work], Beijing: Military Science Press, 1994.

⁵⁶³ Zhang Aiping, *Zhongguo Renmin Jiefang Jun*, p. 357.

⁵⁶⁴ Ibid., pp. 357-358.

Figure 5.1 PLA Awards for Heroism in the 1962 Sino-Indian War

	Medic	Fighter	Asst. Squad Leader/ Squad Leader	Company Grade Officer (Lt/Cpt)	Battalion Level	Political Commissar	Total
Total Awards	9	149	112	48	6	3	327
Party Members	5	49	78	36	4	3	175

MISSION AND FUNCTIONS OF THE GPD

The General Political Department's primary mission differs little today from that if its inception in the early days of the PLA. Its major responsibilities according to recent doctrinal materials are:

- leading the political organization of the PLA, including party building in the Army, developing political plans, educating the PLA;
- building the communist youth league in the PLA;
- supervising, training and testing political cadres in the PLA;
- managing the missions of the cadre and monitoring their accomplishments;
- providing leadership for the accomplishment of security work for the entire PLA;
- working with the CMC Central Discipline Inspection Committee to ensure compliance with CCP policy and regulations;
- managing cultural work in the PLA;
- supervising "mass work" (civil-military relations);
- managing and conducting "liaison activities" for the PLA (propaganda activities and contacts with foreign armies);
- managing and checking military trials and courts martial investigations;
- carrying out political work in wartime.⁵⁶⁵

This is a heavy load of tasks, and the PLA devotes a lot of manpower to their accomplishment. This is most evident at the PLA's Army Command Academy in Nanjing, which trains regimental and division level commanders and Political Commissars, in the structure of the computer simulation and exercise area. The command academy has a mock-up command bunker where simulated division -level exercises are managed on computers and conducted by staffs. In the bunker, the workspaces allocated for the regimental and division political department staffs are

⁵⁶⁵ General Political Department, *Zhongguo renmin jiefangjun zhengzhi gongzuo tiaoli: fudao jianghua* [Regulations on Political Work in the Chinese People's Liberation Army: Instructional Lectures], Beijing: Military Science Press, 1995, pp. 179-251.

larger, have more communications equipment, and can accommodate more people than the areas for the commanders and their coordinating staffs.⁵⁶⁶ But problems plague the CCP, undermining its legitimacy and the position of the political commissar.

Jiang Zemin has reinforced the PC and party branch system, seeking to ensure that he can depend on an army that is ideologically reliable. As a means to combat "westernization," the GPD reaffirmed its policies:

"First, unremittingly safeguard the authority of the Party's third-generation leading collective with Comrade Jiang Zemin as the core and follow the command of the Party Central Committee and CMC (Central Military Commission) with Comrade Jiang Zemin as the core. This has been taken as the primary task of the Party's ideological building under the new situation, as well as the most important part of our Army's organizational principle and political discipline. Second, strenuous efforts have been made for real system and discipline building, so that under whatever circumstances, the whole set of systems that took our Party and Army several decades to form -- **including building democratic centralism, and the system of assigning political commissars and political organs to units at and above the regimental level, assigning political directors and political instructors to battalions and companies, and setting up party branches at the company level** [emphasis added] -- can only be upheld and strengthened, but not be shaken and undermined. Third, in accordance with the development of the situation and new conditions and problems encountered in the course of Party building, much attention has been paid to the honesty and discipline of Party members and leading cadres. Efforts have been made to institute and perfect some new systems, uphold the principle of the Party's exercising strict control over itself, strengthen the mechanism of supervision and checks, and wage an active ideological struggle, this making inner-Party life more principled and militant. Fourth, highlighting stronger building of grassroots Party organizations has helped enhance the capability of implementing the Party's line and general and specific policies in light of the actual grassroots situation."⁵⁶⁷

This long restatement of organization principles and the need for discipline belies the confidence that the CCP has in its system. Clearly today, as in the past, the CCP is concerned with corruption and the abuse of office. In this "third generation" or leadership, however, there are none who can rely on their participation in the formation of the PLA or the CCP as a basis for their legitimacy.

THE STRUCTURE AND ORGANIZATION OF THE GPD

This section will first examine each department and bureau of the GPD, defining its role and mission as best it can be understood. Many of the functions of the GPD are common and recognizable, existing in one form or another in all of the major departments

⁵⁶⁶ The author has visited the Nanjing Command Academy a number of times in 1988, 1996, and 1997 and toured this facility.

⁵⁶⁷ *Jiefungjun bao*, December 17, 1998, p.1, translated in FBIS, Bu Jinbao, "Ensure that the Army is Always Politically Qualified," FTS19990116000797, 16 January 1999.

and services of the PLA. Having introduced the common functions, the remainder of this section will be devoted to the more obscure -- but perhaps most important functions of the organization -- the organizations and functions that most directly affect the lives and ideas of soldiers. In general, the GPD penetration of the PLA is summarized in Figure 5.2.

Without focusing too much on individual personalities, it is natural that the CCP would keep a close watch on the operations and activities of the GPD. This task is usually accomplished by keeping a few senior officers who are also CCP Central Committee members as deputy directors of the department. Currently, Generals Wang Ruilin and Zhou Ziyu perform this function. Zhou Ziyu also serves on the "All Army Secrecy Committee." In this way, he also oversees one of the most important GPD functions, the maintenance of security in the organization. Wang Ruilin is concurrently a deputy director of the General Office of the CCP Central Committee, thus the near-complete control of political rectitude and function within the GPD is ensured by the membership of such senior individuals in other leading party organs.⁵⁶⁸

General Office (*Bangongting*). The General Office serves as the headquarters management section of the GPD. It controls the flow of paperwork, manages and screens paperwork going to the directors and deputy directors, manages the budget, calendars and daily affairs of the headquarters, and responds to correspondence directed to the headquarters. The secretaries (*mishu*) for the department and its leaders also are managed by the office. The general office may conduct research and studies of issues or problems, but this author believes that, more routinely, the General Office will route studies to other sections, monitor their completion, and direct the studies to senior leaders in the GPD and the Central Military Commission. The summarized studies probably include recommendations.

Organization Department (*Zuzhi Bu*). The organization department is responsible for the affairs of the CCP committees in the PLA and for providing them basic guidance. It manages the political commissar system and the youth division of the PLA, recruiting new members for the communist party and vetting their suitability for membership. In addition to the important function of managing cadre and "youth affairs" for the PLA, the department supervises programs and establishes regulations for the various departments.

Cadre Department (*Ganbu Bu*). The Cadre Department serves perhaps one of the most critical functions within the PLA. It is this organization that maintains the personnel records and manages transfers and assignments within the GPD, and the system of Cadre Departments in the rest of the PLA. One of the most important functions for cadre is the maintenance of the "system of inner military democracy" (*jun nei minzhu zhi du*). This the system by which the PLA runs the entire system of democratic centralism within the PLA, ensuring that, in principle, there is an established way for soldiers to

⁵⁶⁸ *Directory of People's Republic of China Military Personalities*, October 1999, pp. 5, 21.

provide their opinions within the unit to the CCP, and then that once a "party line" is established, the rank and file understand and hew to the line.⁵⁶⁹

Mass Work Bureau (*Qunzhong Gongzuo Ju*). This bureau is responsible for managing basic civil-military relations for the PLA. This is especially important since the defensive doctrines of the PLA call for a great deal of support from the militia. It is likely that the Mass Work Bureau also has a role in organizing or providing guidance to the People's Armed Departments that provide the basic organization of contact between the PLA and local forces, run the recruiting and conscription system, and organize civil defense (including air defense) for China. Mass Work is also a function that includes developing a domestic logistic support framework for the PLA in case of external attack.

Veteran Cadre Bureau (*Lao Ganbu Ju*). Retired or veteran cadres are a potentially volatile group if they are deeply dissatisfied with their lot. The GPD is increasingly interested in formal mechanisms to make life a little better and more reliable for veterans and their families. Demobilization of soldiers, however, made the care and treatment of these veterans a major issue.

Cultural Functions

Propaganda Department (*Xuanchuan Bu*). The Propaganda Department manages the promulgation of indoctrination materials, ideology, party mobilization for political campaigns, and party education. This includes the politicization of art and literature (including music and plays) as a major feature of the communist system.⁵⁷⁰ In the PLA and the CCP, the rationale for the political function of art and literature is the focus of Mao Zedong's "Yan'an Lectures in Literature and Art." All of the cultural forms are intended to support the CCP and its line; the GPD is the organ that is supposed to ensure the political rectitude and acceptability of cultural expression.⁵⁷¹ Thus, within the GPDs Cultural Department there are sections responsible for film, television and radio, art and printing, literature, drama, opera, and sports. The PLA's daily newspaper, *Jiefangjun Bao* is published under the supervision of the GPD, as is a literary press and a pictorial magazine (*Jiefangjun Huabao*). One of the more creative film studios in China, *Ba Yi Dianying Chang* (August 1 Movie Studio), is run by the PLA GPD.

Military Museum of the Chinese People's Revolution (or PLA Military Museum). The PLA military museum is the repository of weaponry, artifacts, books and documents. It is devoted to keeping alive the history of the PLA and the honors of its

⁵⁶⁹ Zhang Yongtao, ed., *Dangdai Zhongguo zhenzhu zhidu*, Beijing: Gaodeng jiaoyu chubanshe, 1990, pp. 218-19.

⁵⁷⁰ Admittedly, it is also a common feature of Chinese dynastic culture, as pointed out by Joseph R. Levenson, *Confucian China and its Modern Fate: A Trilogy*, 3 vols. Berkeley, CA: University of California Press, 1965.

⁵⁷¹ Mao Zedong, "Talks at the Yan'an Forum of Literature and Art," in *Selected Works of Mao Zedong*, vol. 3, Peking: Foreign Languages Press, 1967, pp. 69-98. The 1982 conference of literature and are repeated this formula.

leaders and units. The museum's grounds also contain an association for Veteran Cadre and the offices of a number of front companies associated with the GPD.

Security, Promotion and Discipline Functions

One of the most effective ways that the GPD keeps PLA leaders and party cadre disciplined is through the personnel and security management functions that the GPD performs. The communist party refers to PLA leaders and soldiers who are staying for a career as "cadre".

Cadre Department (*Ganbu Bu*). After a specified period (which I believe to be 9 years at present) no soldier stays in the PLA unless he or she moves into cadre ranks. The GPD, in its Cadre Department, maintains their party dossiers and manages their careers. It also manages the promotion system within the PLA and personnel assignments.

Security Department (*Baowei Bu*). The Security Department manages their special dossiers dealing with behavior, loyalty, intelligence, counterintelligence and security matters.

Discipline Inspection Department (*Jilu Diaocha Bu*). In the event of non-security, discipline or behavior related activities, the Discipline inspection department gets involved. One of the central functions performed by the Discipline Inspection Department is investigating corruption and compliance with party regulations ordering the PLA to divest itself from businesses.⁵⁷² It is important to remember that we are talking about functions that manage or control the behavior of communist party members. If a rank and file soldier, even a junior officer who is not a CCP member, has a discipline problem it is handled through the normal system of military courts.

Justice Bureau and the Procurate. Military judges and the military court system are managed by the supervision of the GPD. There is a close relationship between the Justice Bureau and the Discipline Inspection Department. The GPD administers both infractions of military law and regulation and infractions of internal party regulation, meting out separate punishments. It is entirely possible, therefore, that a party member could be an exemplary soldier, but a less than perfect or even seriously flawed communist party member, and get an award for "soldierly behavior" while being disciplined by the CCP.⁵⁷³

For cadre, the GPD system of dossier management, discipline inspection, counterintelligence, and controls comes most seriously into play when cadre and soldiers are considered for promotion. The best descriptions of the promotion process and its relationship to the leadership of the unit commander came from officers with whom this writer had contact in 1996 and 1997 in PLA units of regimental size:

⁵⁷² Zhang Yuntao, ed., *Dangdai zhongguo zhengzhi zhidu* [The Current Chinese Political Work System], Beijing: Gaodeng jiaoyu chubanshe, 1990, pp. 214-215.

⁵⁷³ Shambaugh has a good description of the handling of inner-party discipline in the context of the Tiananmen Massacre. Shambaugh, "The Soldier and the State in China," pp. 364-365.

At the time that an officer is eligible for promotion, the political director (instructor, or commissar) of unit to which the individual is assigned approaches the commander and deputy commander.

The unit commander is told which officers are eligible for promotion and is asked to rank the officers as he or she sees their performance and future potential.

The commanders make formal recommendations about the promotion. But in the end, the GPD representative system convenes a party branch or department meeting within the organization. It is at that meeting that the political commissar (or appropriate GPD system official), in consultation with the units communist party committee, makes the selection.

Thus a commander may prefer a certain officer (or soldier) for promotion, but ultimately the decision to promote the officer is not made by the commander, it is made by the political commissar system. More importantly, the Security Department may exercise a veto over an advancement within the party system because some breach of party discipline or secrecy that the commander may not have been aware of. There is no need to go through the detail of describing the process at each level of military organization. For the purpose of this study it is sufficient to say that the system functions the same, regardless of level. The significance of this process, however, is that the best leaders, the most innovative officers and soldiers, may not be promoted as long as political rectitude of participation is the main criterion for selection. Moreover, the preferences of the combat commander may be frustrated, if that commander is even making independent choices, since the commander is also a party member.

Administrative Functions in the GPD

The Subordinate Organization Coordination and Work Department. The functions of the *Zhishu Jiguan Gongzuo Bu* are most likely the management of services, technical support, budget support, and administration for the other PLA organizations subordinate and internal to the GPD.

Foreign Affairs Office (*Wai Ban*). This is a function that is mirrored at all levels of the PLA where there is contact with foreign militaries. The officers that staff the section are usually trained in foreign languages, security and counterintelligence, and the gathering of foreign intelligence.

Security Work Department (*Baowei Bu*). The Security Work Department carries out security education, defensive counterintelligence (preventing foreign agents from gathering information), and investigations of security violations.

Veteran Cadre Bureau (*Lao Ganbu Bu*). The GPD manages a system of veterans' organizations and veteran's clubs at the military sub-district and local level. It organizes veterans for political work, and ensures that their families are cared for in the event of their death. This bureau serves a mixed function. On the one hand, it provides the necessary care for veterans. But there is a history of veterans engaging in anti-regime and anti-authority outbursts. Veterans have not only been used to carry out regime

programs, such as the collectivization of the countryside,⁵⁷⁴ but they have been used to develop outlying areas. When 6.5 million soldiers were demobilized from the PLA between 1956 and 1967, they were organized into work units such as the Production and Construction Corps and sent out to develop remote areas as well as to establish a communist party presence.⁵⁷⁵ Veterans have shown themselves to be volatile, however, both in the cultural revolution and in the Tiananmen Massacre in 1989.⁵⁷⁶ Therefore, this is a critical function of the GPD.

Liaison Department (*Lianluo Bu*). The Liaison Department is responsible for managing propaganda against enemy forces and for relations with Taiwan. Members of the Liaison Department also conduct prisoner of war interrogations in wartime.

The System of Cadre Secretaries

As previously discussed, in most PLA organizations above the regimental level there is a system of secretaries (*mishu*) who handle the most sensitive inner party materials. These people coordinate positions on political and military related issues for their principal supervisors; maintain the documents in secrecy, and act of their principals to frame out positions when there is disagreement. Handling and mediating the most sensitive inner party work is probably the main function of this department. This is most important at the highest levels, since the consultation on major party issues to sample opinion among senior leaders and establish a consensus on any given issue is managed through the secretary system. These secretaries are analogous to the functions of "executives" and "flag secretaries" to the major staff directors in the United States armed forces. It is most likely that this function is what the original "system of general secretaries department" evolved into.

The organization of the GPD, its size, and its intrusiveness into what Western professional armies think of as traditional functions of command and military discipline leads to questions about whether the PLA can function effectively in combat. Just what do Political Commissars do when the PLA leaves garrison to fight? And is the commander able to lead his men in combat? These are difficult questions to answer, but the case study below is instructive. It reinforces much of what the author has heard from senior PLA officers.

⁵⁷⁴ Franz Schurmann, *Ideology and Organization in Communist China*, Berkeley, CA: University of California Press, 1968, p. 451.

⁵⁷⁵ Alan P. Liu, *Political Culture and Group Conflict in Communist China*, Santa Barbara, CA: Clio Press, 1976, pp. 161-62.

⁵⁷⁶ Ibid. 162-63. During the PLA actions in the period between May 20, 1989 and June 15, 1989, the author observed and spoke to a number of veterans engaged in violent anti-communist party activities.

A CASE STUDY OF THE SINO-INDIAN WAR: PARTY MEMBERSHIP, COMBAT LEADERSHIP, AND CASUALTIES

One of the main critiques of the political commissar system and the function of the GPD is that the political commissar interferes with or usurps the duties of the commander. If this is true, it can be a hindrance in combat, preventing decisive action and costing lives. Many senior leaders, however, deny that this is the case. Instead, they argue that the GPD and the political commissar system is a source of inspiration and esprit d'corps that helps the commander. Alexander George, who did extensive research on the role and function of political commissars in both the Communist and Nationalist armies, found many negative feelings among soldiers and officers about the role of the commissar. In most cases, they were seen to be too ideologically rigid.⁵⁷⁷

One way to understand leadership style in the PLA and to gain some understanding of the role of the party member or political commissar is to look at the results of combat. Are PLA commanders leading? Are political commissars out doing the job of the commander leading troops in combat? Casualty rates and awards for heroism give some hint of the answer to these questions. One case study is available that permits some empirical examination of the evidence—that of the Sino-Indian War.⁵⁷⁸

In the Sino-Indian War of 1962, the PLA showed great acumen in carefully executing the campaign according to the guidelines formulated by CCP Central Military Commission: 1) "to beat Indian troops soundly, " and 2) "to wipe out the invading Indian forces totally and rapidly." During the campaign, the PLA destroyed the fighting strength and captured personnel of three brigades of the Indian Army (the 7th Brigade, including its commander Brigadier Dalvi, the 62nd Brigade and the 4th Artillery Brigade). In addition the PLA seriously mauled five other Indian brigades (the 11th, 48th, 65th, 67th, and 114th).⁵⁷⁹ According to PLA records from archives, Indian casualties during the war were 4,897 killed or wounded and 3,968 captured.⁵⁸⁰ Indian records differ on this, with Indian Defense Ministry in 1965 showing 1,383 Indian soldiers were killed, 1,696 missing in action, and 3,968 soldiers captured, and 1,047 wounded.⁵⁸¹ In comparison, PLA casualties in the war were quite small, with 722 Chinese soldiers killed and 1,697 wounded. In addition, no soldier of the PLA was captured during the war, a rarity in the

⁵⁷⁷ George, *The Chinese Communist Army in Action*, pp. 75-81.

⁵⁷⁸ Jiang Siyi, Li Zhong, et al, eds., *Zhongguo bianjiao ziwu fanji zuozhan shi* [A History of the War of Defensive Counterattack on the Sino-Indian Border], Beijing: Military Science Press, 1994.

⁵⁷⁹ Xu Yan, *Zhong-Yin bian jiao, zhi zhan li shi zhen xiang* [The Historic Truth of the Sino-Indian Border War] Hong Kong: Tian Di Publishing Co., 1993, cited hereafter as *Zhong-Yin Bian Jie*. The other major work to come out is Jiang Siyi and Li Hui, eds., *Zhong Yin bian jiao zi wei fan ji zuo zhan shi* [The History of China's Counterattack in Self-Defense on the Sino-Indian Border], Beijing: Military Science Press, 1994.

⁵⁸⁰ Ibid., p. 185.

⁵⁸¹ Ibid.

history of warfare.⁵⁸² The PLA did all of this damage to the Indian Army with the equivalent of a reinforced corps (army), deployed and massed at the critical points along the border.⁵⁸³

In that war, according to an appendix of the PLA history of the "self-defensive counterattack," some 327 soldiers and officers of the Chinese force were given awards for heroism. Over half of these awards were given to members of the Chinese Communist Party or, in the case of younger soldiers, the Communist Youth League. This is a small case form which to extrapolate the data, but it seems clear that unless party affiliation was a criterion for being considered a hero, the PLA's claims that CCP membership and the existence of the political commissar system may help build esprit d'corps. Moreover, if one examines the data in Chart 4, it is clear that Chinese military leaders lead from the front. That is, a substantial number of small unit leaders, whether squad leaders or platoon and company grade-officers, were given awards for heroism in combat. In fact, some 160 small unit leaders were cited for heroism, of which 114 were CCP members. Among basic soldiers, 158 "fighters" and medics were given awards, of which 54 were party members. Only three political commissars or political directors got awards.

These data are limited, and it is generally not a good idea to generalize from one case. But this may be the best case we get to work from, since the PLA hasn't published its combat records and records of decorations for bravery in the public domain. That said, from the examination of the combat decorations given for bravery in the Sino-Indian War, my sense is that PLA leaders lead from the front. Party membership seems to lead to leadership behaviors in other situations, and the responsibility that seems to flow from being part of an elite organization like the communist party appears to makes soldier and leaders take greater risk. The work of the GPD in promoting unit lineage and history probably also contributes to the willingness of ordinary soldiers and leaders to take extraordinary risks. The award data seems to imply that political commissars, directors and instructors, if one can extrapolate from this case, stay out of the way of the commander in combat. They are probably of more help than a hindrance. And the influence of the CCP and its members is positive. If commissars were leading "from the front" one would expect them to have had a much higher casualty rate and rate of awards for heroism.

The Sino-Indian War data is generally the same as the conclusions that Alexander George drew in his examination of the way that communist party membership and the political commissar system worked in combat in the Korean War.⁵⁸⁴ However, as George points out, when morale erodes in the face of serious combat losses, the effect of

⁵⁸² Xu Yan, *Zhong-Yin bian jie*, p. 184

⁵⁸³ Xia Liping and Larry M. Wortzel, "PLA Operational Principles and Limited War: The Sino-Indian War of 1962," a paper prepared for the Center for Naval Analyses, 1999.

⁵⁸⁴ George, *The Chinese Communist Army in Action*, pp. 145-150.

political education is less and the PLA soldier tends to question the political commissar, the purpose of the war, and his message.⁵⁸⁵

The GPD is learning from the study of other militaries, and is slowly changing its role. It is studying the ways that Western militaries build morale and esprit through incentives and advanced civil education, as well as the personnel, retirement, and legal systems of other armed forces.

REFORM AND CHANGE IF THE ROLES OF THE GPD

In the past decade there have been systematic efforts by the GPD to regularize and systematize its role in personnel and the military discipline system of the PLA.⁵⁸⁶ As early as 1988, the GPD and the military procurate system began to reach out to Western armies to examine how due process and family law-related issues are managed.⁵⁸⁷ The GPD has taken on more of a role as a career management organization encouraging the PLA to become a more professional military force with a stronger emphasis on military skills.

At the same time, the communist party is quite clear that, while it seeks to evolve, and seeks to have the GPD take on a wider role as a personnel and legal management organization, it remains concerned about political rectitude. In a broadcast summing up political work in the PLA in the years since the 14th Party Congress, the CCP calls for its political commissars to:

"Focus on the pervading influence of the Western hostile forces' political schemes to 'Westernize' and 'separate' our country, as well as the mistaken thinking of a 'non-party military, non-political military'."⁵⁸⁸

The GPD is thus torn between a focus on the things it must do to improve the lives ensure that Chinese soldiers and their families and what it must do to comply with

⁵⁸⁵ Ibid., pp. 186-93. One soldier remarked to George that if the political commissar system was destroyed, the PLA would be completely ineffective.

⁵⁸⁶ A recent effort to assess the changes in regulations in the PLA is Thomas A. Bickford, "Regularization and the Chinese People's Liberation Army: An Assessment of Change," *Asian Survey*, Vol. XI, No. 3, May/June 2000, pp. 456-474.

⁵⁸⁷ The GPD's legal department began contacts with the United States Army on military personnel and military justice matters in 1988. The cessation of military-to-military exchanges after the Tiananmen Massacre in 1989 stopped these exchanges, but they restarted in the mid-1990's. See Central Military Commission Legal Bureau, *Zhongguo Renmin Gongheguo junshi fagui huibian* [A Collection of the Military Laws and Regulations of the People's Republic of China], Beijing: Zuongguo minzhu fazhi chubanshe, 1991.

⁵⁸⁸ "For PRC Military Ideological, Political Education Stressed," Beijing *Xinhua Domestic Service*, in FBIS-CHI-2000-0625 (hereafter FBIS), CPP20000625000035, 25 June 2000.

communist party Chairman Jiang Zemin's directive to "put ideological and political development in the premier position among all the army's development projects."⁵⁸⁹

On the one hand, the PLA is passing new regulations guaranteeing due process and the rule of law in the armed forces. The GPD is developing a system to rotate its cadre at the regimental level and higher on a regular basis to engender a broader base of experience among officers. And the GPD is working to emphasize the need for attention to military training. At the same time, new political campaigns are mounted on a regular basis that cause the political commissar system to function in its traditional role. The "three speaks campaign," for instance, which started in the summer of 2000, called for the rank and file soldier to "speak of study, speak of politics, and speak of correctness."⁵⁹⁰ The desire to present the political commissar system as a model for democratic centralism and political rectitude, and the moves toward a regularized role for the GPD as a personnel management system, do not represent mutually exclusive objective. But these seemingly conflicting objectives place a greater burden on the GPD to justify its function in the PLA.

CONCLUSIONS

On balance, given the difficulty of the job and the roles the institutions must perform, the GPD and its political commissar system are probably greater assets than liabilities to the CCP. The role of the political commissar in the unit is probably not a great hindrance so long as China remains a one-party, communist-led dictatorship. Given the CCP's objectives, the façade of a democratic system that is embodied in "People's Democracy" in PLA units permits the CCP to claim legitimacy while democratic centralism ensures that a consistent party line is the outcome of any discussion. But it seems that there is some discussion that takes place, giving an outlet for the expression of views, and a pipeline to have those views made known to the senior leadership of the Army.

The failure of socialism has led to a great deal of economic reform in China. This whole process has made the legitimacy of Marxism-Leninism suspect but the repressive nature of the system and its control of the organs of force like the PLA prevents serious change.⁵⁹¹ Nonetheless, many people today probably join the CCP as a way to get ahead rather than out of dedication to the principles of the party and the Army. Certainly this is the case in other Marxist-Leninist systems.⁵⁹² But they still may well accept the increased responsibilities for the leadership of soldiers that membership implies.

⁵⁸⁹ Ibid.

⁵⁹⁰ Ibid., p. 2

⁵⁹¹ A good discussion of this point is in Gerhard E. Lenski *Power and Privileges*, New York: McGraw Hill, 1966.

⁵⁹² The seminal case for this argument is made in Milovan Djilas, *The New Class*, New York: Holt, Rinehart and Winston, 1957. See also Milovan Djilas, *The Unperfect Society: Beyond the New Class*, New York: Harcourt, Brace and World, 1969. The argument is developed in Rudolf Bahro, *The Alternative in Eastern Europe*,

The Political Commissar system is very important because it permits the GPD to control promotions and assignments. However, there are negative sides that are difficult to escape from the control that the system affords. Democratic Centralism and the discipline inspection system ensure overt political conformity (if not reliability and belief). But the rigidity of the system probably stifles initiative, resourcefulness and adaptability in the PLA. The discipline inspection system no doubt provides a model for behavioral and fiscal rectitude in management, but it is also a source of concern and fear. In the end, because of the strength of the requirement for CCP membership and conformity, the best people (that is, the most resourceful, charismatic and caring military leaders) may not rise to the top. And even in cases where such leaders do emerge, the tendency may be to do as they are told instead of as they think is best.

For the present time, the latest statement by the State Council of China in the national defense white paper *China's National Defense 2000*, published on October 16, 2000, sets out the role of the CCP in managing the military, and by extension the General Political Department, which would be the body charged to carry out the future vision of the state:

The Chinese armed forces adhere to the absolute leadership of the Communist Party of China and persist in making it their aim to serve the people heart and soul, placing the interests of the state and the people above everything else and carrying forward the patriotism and revolutionary heroism of the rank and file. They cultivate in their officers and men a firm faith in revolutionary ideals and a spirit of sacrifice and dedication, foster in them a correct outlook on the world, life and values, educate them to support the reform, to persist in building the armed forces' true political qualities of arduous struggle.⁵⁹³

The GPD may not evolve into another form in the near term. In other communist states the removal of political commissars from the military only followed the establishment of a multi-party system and democratic elections. As the national security strategy for the year 2000 sets out, it is the GPD that would cultivate "the correct outlook on the world," and to "educate them [the people] to support the reform." For the present, the political commissar system serves the purpose of the Chinese Communist Party. As long as China is a single-party state with a military subordinate to the party, the General Political Department is not likely to be significantly changed. And party dossiers will give the CCP a lot of control over military leaders. A major function of the PLA and the

Manchester, UK: New Left Books, 1978; Leszek Kolakowski, *Main Currents of Marxism, Vol. 3: The Breakdown*, Oxford: Clarendon Press, 1978; and George Konrad and Ivan Szelenyi, *Intellectuals on the Road to Class Power*, New York: Harcourt Brace Jovanovich, 1979. A discussion of the phenomenon of the instrumental use of communist party membership for personal gain in China can be found in Larry M. Wortzel, *Class in China: Stratification in a Classless Society*, Westport, CT: Greenwood Press, 1987.

⁵⁹³ Information Office of the State Council of the People's Republic of China, *China's National Defense in 2000*, Beijing: Xinhua News Agency, 16 October 2000, p. 16.

militia continues to be maintaining the CCP's control of the populace, and the maintenance of "civil order."⁵⁹⁴ Deng Xiaoping made this clear when he spoke to the PLA units that took part in the Tiananmen Massacre.⁵⁹⁵ Thus the major threat faced by the PLA remains the current of reform and political change in China. In the event of real political change in China, reform of the General Political Department and the establishment of an apolitical military that is the instrument of the state will be a confusing process.

⁵⁹⁴ Thomas C. Roberts, *The Chinese People's Militia and the Doctrine of People's War*, Washington, DC: National Defense University Press, 1983.

⁵⁹⁵ Huang Xiaozhong, *Sixiang zhengzhi gongzuo 70 nian* [70 Years of Political Thought Work], Beijing: Guofang daxue chubanshe, 1991, pp. 1029-1031.

6. THE PEOPLE'S LIBERATION ARMY (PLA) GENERAL LOGISTICS DEPARTMENT (GLD): TOWARD JOINT LOGISTICS SUPPORT

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INTRODUCTION

"We believe that in the 21st century, when high-technology warfare becomes the main form of war, precision-oriented logistics is inevitably the way forward. Precision-oriented logistics reflects the nature of military logistics in the information age... to achieve effective support...with relatively small input, but relatively high efficiency."

- Cheng Kuaile and Zhang Ping, Logistics Command College, 2000⁵⁹⁷

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⁵⁹⁷ Cheng Kuaile and Zhang Ping, "Precision-Oriented Logistics: Objective of [the] Logistics Revolution in the 21st Century," *Zhongguo junshi kexue*, 20 November 1999, translated in FBIS, 4 February 2000.

Of the myriad of modernization challenges the People's Liberation Army (PLA) faces to prepare to fight a modern, regional war under high tech conditions, logistics is one of the most complex. If the PLA hopes to realize even a limited, power projection capability, likely based around Rapid Reaction Units and other key assets, it must develop an effective joint logistics capability. Without this, China's conventional regional deterrent and its ability to underwrite its key national security objectives could be affected.

Accordingly, the PLA has targeted improved logistics to support joint combat as the main goal of its logistics reforms. This goal will be challenged by the realities of a large multi-generation inventory of equipment, limited resources, and influences and distractions from the PLA's continuing and unique involvement in administrative logistics, production, and support to the Chinese economy.

How the PLA, in general, and the General Logistics Department (GLD), in particular, address these challenges to transform PLA logistics into a high tech joint support system remains to be seen. Since China's ability to project military power will depend upon its logistics capabilities, it is a critical area to investigate. But assessments and measurements of the PLA's success or failure should avoid simplistic and direct comparisons to other modern military logistics systems, especially evolving Western logistics systems. Analysts should avoid assessments based on perennially limited information, that habitually disdain PLA logistics as a historically weak link. On the contrary, PLA logistics have proven highly adaptable and flexible to the situation. Often PLA logistics was not "pretty." It lacked efficiency, expended excessive personnel and other resources, or it failed to support decisive engagements. Significant shortfalls do exist. Nonetheless, PLA logistics has been proficient in providing sufficient operational support to massive numbers of personnel and equipment of mixed generations and origins that would make Western logisticians blanch. Their efforts to achieve a sufficiently effective joint logistics system with Chinese characteristics warrant sustained objective analysis.

This paper reviews the PLA's development of its logistics organization with focus on the top structure, examines its recent efforts to develop joint logistics, speculates on the GLD's influence within the PLA, and provides some thoughts on PLA modernization over the next ten years.

ORGANIZATIONAL HISTORY⁵⁹⁸

In the armed forces of developing countries, logistics has consistently been the slowest component to develop. Yet, logistics...provide one of the greatest constraints upon the buildup of these forces beyond a certain point. Modern China has proven no exception. Logistics...[was] a central weakness of the Nationalist military...Communist military forces...appreciated more fully the role of resupply in military operations, and this comprehension proved an important factor in their victory... Gillespie and Sims⁵⁹⁹

PLA logistics has been shaped by the unique political and economic history of the People's Republic of China. Through its support of internal revolution, repelling Japanese invaders and periodic border conflicts, as well as its deep involvement in national economic development, the PLA logistics system has developed distinctive characteristics. These will affect its latest modernization effort, which seeks nothing less than credible joint support of combat operations.

The development of PLA logistics has been particularly influenced by key experiences within four phases since the founding of the PLA:

- Revolutionary and Anti-Japanese Experience (1930s-1949)
- Korean War and Soviet Alliance and Assistance during the 1950s
- Political Struggle and Modernization (1959-1979); Troubles North and South (Sino-Soviet Border Conflict 1968 and Sino-Vietnam Border War)
- 1980-1989 - Opening to the West
- 1990-Gulf War; Taiwan

⁵⁹⁸ Among the sources consulted in developing this historical review of Chinese logistics organization and operations were: Richard Gillespie, and John C. Sims, Jr., "The General Rear Services Department," in William W. Whitson, , ed., *The Military and Political Power in China in the 1970s*, New York: Praeger, 1972 pp. 185-213; Harlan W. Jencks, *From Muskets to Missiles: Politics and Professionalism in the Chinese Army, 1945-1981*, Boulder, CO: Westview Press, 1982; Shuguang Zhang, *Mao's Military Romanticism: China and the Korean War, 1950-1953*, Lawrence: University of Kansas, 1995; and William W. Whitson, *The Chinese High Command: A History of Communist Military Politics, 1927-71*, New York: Praeger Publishers, 1971. See also Harvey W. Nelson, *The Chinese Military System: An Organizational Study of the Chinese People's Liberation Army*, second edition, Boulder, CO: Westview Press, Inc., 1981; You Ji, *The Armed Forces of China*, I.B. Taurus, 1999; *Handbook on the Chinese Armed Forces*, Defense Intelligence Agency, July 1976; Samuel B. Griffith, II, *The Chinese People's Liberation Army*, New York: McGraw-Hill Book Company, 1967; Gerald Segal, *Defending China*, Oxford: Oxford University Press, 1985; Paul Godwin, *Development of the Chinese Armed Forces*, Air University Press, Maxwell Air Force Base, June 1988; and Ngok Lee, *China's Defence Modernisation and Military Leadership*, New York: Australian National University Press, 1989.

⁵⁹⁹ Gillespie and Sims, p. 185.

Revolutionary and Anti-Japanese Experience (1930s-1949)

According to a Chinese reference, military logistics was established in the Red Army at the time of the founding of the army. By November 1931, the Red Army had organized to provide military supplies, ordnance, medical, transportation and other support. Red Army re-supply depended upon three sources - captured Japanese and Nationalist materiel and stocks; taxation and requisition; and troop production.⁶⁰⁰ Since commanders personally managed logistics as an additional responsibility, specialization in logistical support was slow to develop.

In the second half of 1939, the Central Military Commission established a logistics organization to manage medical and other support. By 1942 the Eighth Route Army established a rear services department (*houfang qinwei bu*) with subordinate elements managing medical support, etc.

Logistical requirements expanded during the latter half of the 1940s, when the defeat of Japan and the subsequent outbreak of the Chinese Civil War made a greater amount of supplies and materiel available to the Red Army. During late 1945, the Red Army incorporated 300,000 rifles, 4,836 machine guns, 1,226 artillery pieces and 2,300 vehicles taken from the defeated Japanese army. In April 1946, they acquired armor from the Nationalists at the battle of Changchun, and anti-aircraft weapons from two Mukden arsenals in 1948.⁶⁰¹

Between 1946-1950, PRC sources claim the military acquired a total of about 3.2 million small arms, over 300,000 machine guns, over 54,000 artillery pieces, 622 tanks, 189 military aircraft, and 389 armored cars, plus extensive stores of supplies.⁶⁰² An estimated 60% of all material the U.S. provided the Nationalist forces eventually became Red Army assets.⁶⁰³

In addition to equipment and supplies, by 1946 the Red Army logistics support faced the challenge of incorporating 75,000 Nationalist troops into the military, while managing logistics support to about 1.5 million demobilized Nationalist soldiers.⁶⁰⁴ These additional resources dramatically increased the Red Army's need for expanded logistical management and control. Consequently, the logistical system became more regularized, and specialized logisticians developed.⁶⁰⁵ Political commissars also played

⁶⁰⁰ Gillespie and Sims, p. 186-187.

⁶⁰¹ Ibid., p. 189.

⁶⁰² Ibid.

⁶⁰³ Ibid, p. 190.

⁶⁰⁴ Ibid., p. 189.

⁶⁰⁵ Despite the Nationalists own logistics shortfall, once they were captured or surrendered, Nationalist soldiers and officers, many who had received U.S. training, may have helped the PLA develop a more centralized system. One PRC source noted the Guomindang military established a rear services organization as early as August 1937, and had strengthened centralization by 1946.

an increasingly central role in procurement of labor and materials, which relied on mobilization of local populations.⁶⁰⁶

By 1949, long experience with persistent shortages and irregular supply had taught the Red Army leadership the value of supply discipline. The revolutionary experience had also dramatized the necessity to adequately care for soldiers to sustain morale and cohesion. The importance of troop production to sustain self-sufficiency and lessen the burden on local populations was also demonstrated, as was the importance of mass mobilization, a primary role of the political commissar. At the same time, the easy acquisition of captured materiel and supplies, as well as the limited role airpower and naval forces played in the Red Army's decisive victory, left the PLA with an Army-centric experience of modern warfare. By the end of the civil war, the PLA possessed a large, but eclectic, supply of foreign equipment and materiel. From a logistical point of view, such a collection of mixed sources and equipment densities may have encouraged a continued tradition of flexibility, adaptability and improvisation, but it came at the expense of standardization, interchangeability, and regularization in supply, maintenance, and production.

Despite the Red Army's success in providing support to the field, at the time of the founding of the PRC military logistics remained largely decentralized under the five field armies who sustained self-sufficiency.⁶⁰⁷ Victory, nonetheless, provided impetus to consolidate and organize PLA logistics under a more centralized system. By 1949, the General Rear Services Department was established under the leadership of Yang Lisan, former head of logistics in the Second Field Army.⁶⁰⁸

Korean War and Soviet Alliance and Assistance during the 1950s

The Korean War alerted the PLA leadership to the "the importance of logistic[s]...in a modern war"⁶⁰⁹ and the need for major change. When China entered the war, logistics support to the operations was carried out under the policy of "self-reliance and basing ourselves on home supplies."⁶¹⁰ This policy, which the acting Chief of Staff, Nie Rongzhen, credited to Zhou Enlai, who oversaw details of logistics support of the Chinese People's Volunteers (CPV) from the rear, depended on the local

⁶⁰⁶ Ibid.

⁶⁰⁷ Ibid., p. 191.

⁶⁰⁸ Whitson, William W., *The Chinese High Command*, Chart V. For discussion of Yang Lisan's role (which appears to be quite limited) to provide logistics support during the Korean War, see Shuguang Zhang, *Mao's Military Romanticism* and Chen Jian, *China's Road to the Korean War: The Making of the Sino-American Confrontation*, New York: Columbia University Press, 1994.

⁶⁰⁹ Nie Rongzhen, translated by Zhong Renyi, *Inside the Red Star: The Memoirs of Marshal Nie Rongzhen*, Beijing: New World Press, 1988, p. 645.

⁶¹⁰ Ibid., p. 647.

population for food and the enemy for captured ammunition. It proved inadequate, however, outside China's borders.

As a consequence, Nie lamented, significant, even decisive, operations were squandered or prematurely cut short because of shortfalls in basic supplies, such as clothing, food, or ammunition.⁶¹¹

By the beginning of the Third Campaign, which began on December 31, 1950, the CPV, under the command of Peng Dehuai, began to lose momentum as its forces pushed retreating UN units below the 38th parallel, capturing Seoul, and penetrated south. Mao Zedong sought a decisive victory that would throw UN forces off the peninsula, but stretched supplies lines and inadequate logistics proved insurmountable, and the CPV was eventually forced to withdraw north. UN forces regained control of Seoul.

In his Cultural Revolution "confessions" Peng explained the predicament his exhausted forces faced to carry out Mao's expectations. "[Having] fought three major campaigns in a row in severe winter," he wrote, and having endured relentless punishment from "enemy bombers...our supply lines had now been extended, [so] it was very difficult to get provisions,"⁶¹²

To address the urgent shortfalls, the Central Military Commission directed the Northeast Military Command to hold a special logistics meeting in early 1951. This convened on January 22-30 in Shenyang, and resulted in several improvements in ground and rail transportation support to the war.⁶¹³ But problems continued. In May 1951, Peng sent Deputy Commander Hong Xuezhi to Beijing to urge that an operational unified logistics command be set up to direct all support, including protection of supply lines. The military leadership agreed, but to his dismay, Hong was selected the CPV logistics commander. He, like many revolutionary veterans at the time, disdained logistics. He accepted command only with the promise that he would not have any logistics responsibilities after the war.⁶¹⁴

From 1950 to 1954, Hong Xuezhi concurrently served as the Deputy Commander and Commander of Logistics of the Chinese People's Volunteers (CPV). Under his leadership, the basis for a modernized operational logistics system was established. During the war, China's power projection and support capabilities sufficiently developed to support one million soldiers and underwrite an operational stalemate against a modern, advanced opponent outside China's territory.

Huang Gezheng, a protégé of Peng Dehuai, served as the Director of the General Rear Services Department (GRSD) from 1954 to 1956. After the war, Hong Xuezhi, also closely associated with Peng, became the GRSD director in 1956, while Huang was

⁶¹¹ Ibid., p. 646.

⁶¹² Peng Dehuai, translated by Zheng Longpu, *Memoirs of a Chinese Marshall*, Beijing: Foreign Languages Press, 1984, p. 478.

⁶¹³ Shuguang Zhang, p. 168

⁶¹⁴ Ibid., p. 171.

promoted to Chief of the General Staff.⁶¹⁵ Together – Peng, Huang and Hong – were closely linked to Sovietization. During most of the 1950s, PLA logistics operations and organization developed along the Soviet model. The major focus of Soviet assistance, however, concentrated on the development of China's defense industries. About one half of all equipment the Soviet Union delivered to China "was intended for military enterprises and plants,"⁶¹⁶ which closely involved military production organs of the GRSD.

Political Struggle and Modernization (1959-1979); Troubles North and South (Sino-Soviet Border Conflict 1968 and Sino-Vietnam Border War)

The deterioration of Sino-Soviet relations beginning in 1958, the fall of Minister of Defense Peng Dehuai at the Lushan Conference in 1959, and the subsequent Soviet decision to withdraw its advisors from China in July 1960,⁶¹⁷ all affected GRSD operations as national politics devolved toward the Cultural Revolution (1966-1976). Qiui Huzuo replaced Hong Xuezhi within two months of the purge of Minister of Defense Peng and the rise of Lin Biao, former commander of the Fourth Field Army.

During the 1960s and 1970s, the GRSD became involved in advanced weapons (nuclear) production, as well as its traditional role in conventional military and civilian types of production. The organization, unlike the General Political Department (GPD), weathered the rough waters of the Cultural Revolution (1966-1967), especially the excesses of 1966-1967, but the experience left a complex legacy on PLA logistics.

The organization was credited with protecting military production from disruption and sustaining critical operations of the essential national rail system, but it could not avoid being drawn into political struggle. Many older professional soldiers were purged, and some operations were disrupted. Weapons were taken from logistics storage facilities to arm competing factions. Political commissars suffered most, as did those who were closely associated with Peng Dehuai and Soviet-style professionalism.

Up until Soviet border tensions in the late 1960s abruptly ended the escalating internecine violence and the Red Guards were sent down to the countryside, the GRSD was also credited with providing effective logistical support and transportation to over 50 million Red Guards.⁶¹⁸ Once the military intervened in the day to day running of the country, the GRSD continued to play a key role in sustaining and operating vital national logistical systems.

⁶¹⁵ Gillespie and Sims, p. 197.

⁶¹⁶ Goncharenko, Sergei, "Sino-Soviet Military Cooperation," in Odd Arne Westal, ed., *Brothers in Arms: The Rise and Fall of the Sino-Soviet Alliance, 1945-1963*, Washington, D.C: Woodrow Wilson Press, 1998, p. 160.

⁶¹⁷ Ibid., p. 361.

⁶¹⁸ Former Red Guards marvel at how efficiently the train system supported them as they freely traveled throughout China – enjoying free transportation, food and lodging wherever they went.

For the PLA, the 1968 border tensions with the Soviet Union were a mixed blessing. The tensions provided good reason to contain the excesses of the Cultural Revolution, but also revealed PLA operational and logistics weaknesses, as the PLA shifted its attention to the threat of a stronger, nuclear power along its entire northern border. Mao responded to the nuclear threat by exhorting the people to "dig deep and store grain" to survive attack of the capital and elsewhere throughout the country, stressing cover and concealment of vital operations.

By the end of the 1970s, PLA logistics retained its unique traditions of self-sufficiency and military production,⁶¹⁹ as well as its foundational Soviet influence. As Deng Xiaoping returned to power and initiated a national policy of reform and opening to the West, the basis for "macro-level policy management of the military economic production system" that would balloon into PLA, Inc. in the 1980s and 1990s, was well-established within the GRSD by 1977.⁶²⁰

1980-1989: Opening to the West

Following the Third Plenum of the 11th Central Committee in December 1978, the sixty-seven year old Hong Xuezhi, once again, assumed responsibility for PLA logistics. He headed the successor organization to the GRSD, the General Logistics Department (GLD), from 1980 to 1987.⁶²¹ Between 1985-1987, Hong concurrently served as GLD Director and Political Commissar.⁶²²

The conflict with Vietnam in 1979 "proved to be a testing ground for Chinese military doctrine, its soldiers and equipment."⁶²³ The "lesson" revealed numerous logistics weaknesses to the GLD.⁶²⁴

- Transportation and supply. Both were inhibited by shortages in ground and air transportation. Transportation was provided with a mix of foreign and domestic ground vehicles, including some armored vehicles. PLA forces moved primarily on foot. Vietnamese forces, in contrast, were mobile.

⁶¹⁹ Gillespie, Sims, "The General Rear Services Department," pp. 185-213.

⁶²⁰ Gillespie and Sims,. See also Mulvenon , *Soldiers of Fortune*, Armonk, NY: M.E. Sharpe, 2001.

⁶²¹ One Chinese source claims the GRSD was renamed the GLD as early as 1960, but this contradicts other sources.

⁶²² *Who's Who in China: Current Leaders*, Beijing: Foreign Languages Press, 1989, p. 215.

⁶²³ Singler, Alan J., "The People's Liberation Army in Vietnam and Changes in PLA Military Doctrine," in *How They Fight: Armies of the World*, Washington, D.C.: U.S. Army Intelligence and Threat Analysis Center, June 1995. Also see *Handbook of the Chinese People's Liberation Army*, and *From Muskets to Missiles*.

⁶²⁴ Singler, p. 9.

- Communications. Below the regimental level communications were insufficient to assure secrecy and effective coordination. In contrast, Vietnamese forces were well supplied with modern radios and field phones. Poor communications between the front and support elements caused supply convoys to miss their rendezvous with combat troops.
- Ammunition. Lacking tactical air support, PLA combat forces expended excessive rates of ammunition. Supplies were exhausted at the regimental level before resupply could be provided.

Analysis of China's war in Vietnam caused the PLA to make major shifts in its doctrinal thinking, to emphasize "firepower, synchronization, and economy of force."⁶²⁵

By 1985, the GLD's organization was not significantly different from that of the GRSD. In 1977, for example, (see Figure 6.1) the GRSD had ten subdepartments. It also exercised direct control over GRSD Enterprises and the Military-Industrial Complex and elements of the Service Arms (Railroad Engineers and Construction Engineers). Additionally, the GRSD coordinated with the Capital Construction Engineering Corps and had staff supervision over logistics support within the Main Forces and the Military Region.

⁶²⁵ Ibid., p. 10.

Figure 6.1 General Rear Service Department - 1977

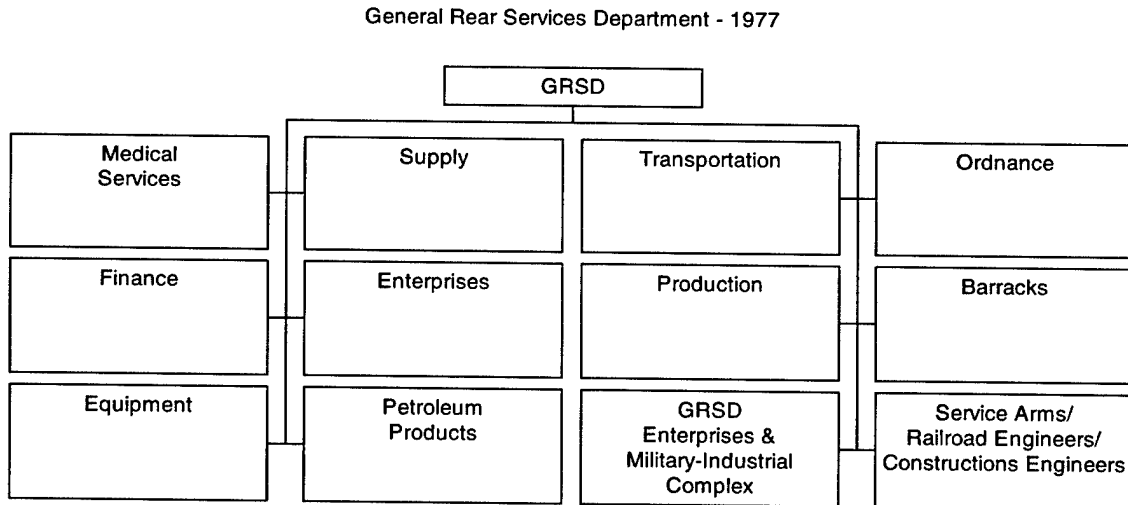


Figure 6.1, Based on Chart V, in Harvey W. Nelson, *The Chinese Military System*, Boulder, CO: Westview Press, Inc., 1981, which was, in turn, based on Gillespie and Sims, p. 194, and Jencks, Chapter 6.

By 1985, GLD consisted of ten subdepartments (Figure 6.2). Functional elements included – Armament, Finance, Fuel, Health, Military Supplies, Science and Technology, and Capital Construction and Barracks. The new Science and Technology Subdepartment, headed by Ye Daxun, was added to oversee acquisition and development of technological improvements, while the addition of the Capital Construction and Barracks subdepartment formalized and centralized GLD command and control.

Figure 6.2 General Logistics Department - 1985

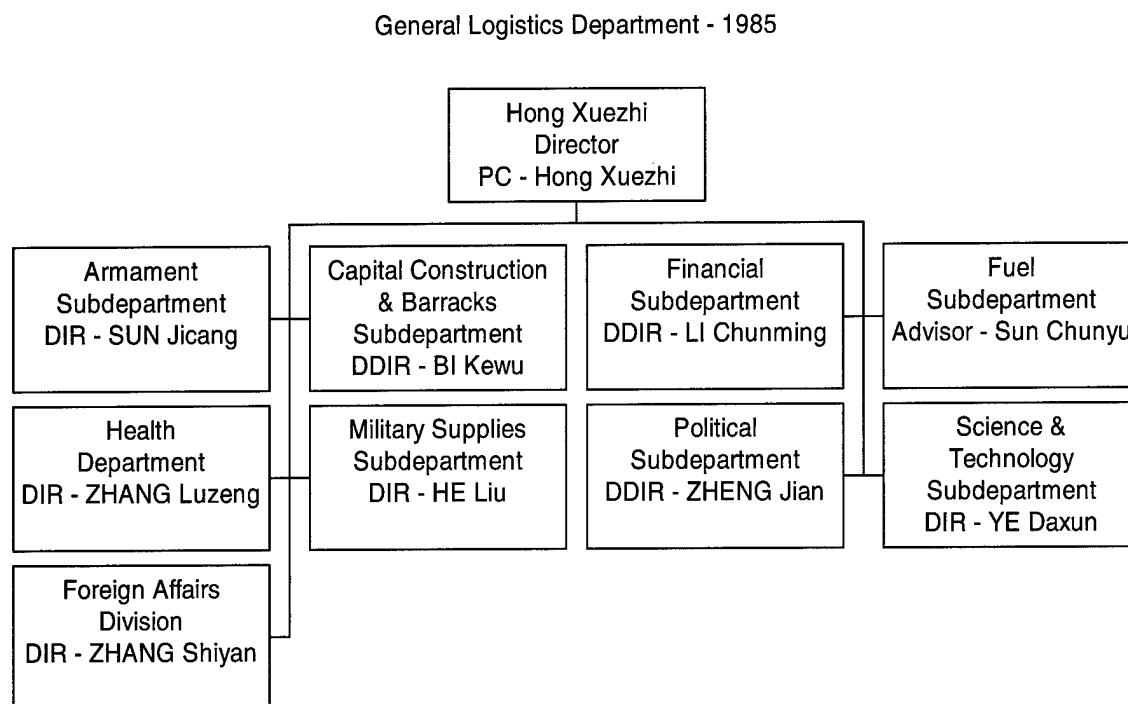


Figure 6.2 based on, *Directory of P.R.C. Military Personalities*, Defense Liaison Office, U.S. Consulate General, Hong Kong, April 1985, pp. 23-25.

Additionally, a Political Subdepartment and the Foreign Affairs Division, headed by Director Zhang Shinyan, were added. The latter provided an interface for the GLD's increasing business contacts with the outside world.

In 1986, the Production Management Subdepartment (PMD) was established in the GLD to manage PLA enterprises and businesses.⁶²⁶ Production Management Offices (*Shengchan jingying banggongshi*) were created at each level of the PLA logistics system to oversee the management of "regional and unit-level conglomerates."⁶²⁷

By 1989 (Figure 6.3), the GLD staff expanded to include 15 subordinate elements: Armament Department, Capital Construction Department, Financial Department, Fuel Department, Health Department, Material Subdepartment, Military Supplies Department, Military Transportation Subdepartment, Political Department, Qinghai-Xizang Army

⁶²⁶ Mulvenon, *Soldiers of Fortune*.

⁶²⁷ Ibid.

Depot Subdepartment, Vehicles and Vessels Department, Foreign Affairs Office, HQ Department, Wuhan Base Command, and Xi'an Base Command.

Figure 6.3 General Logistics Department - 1989

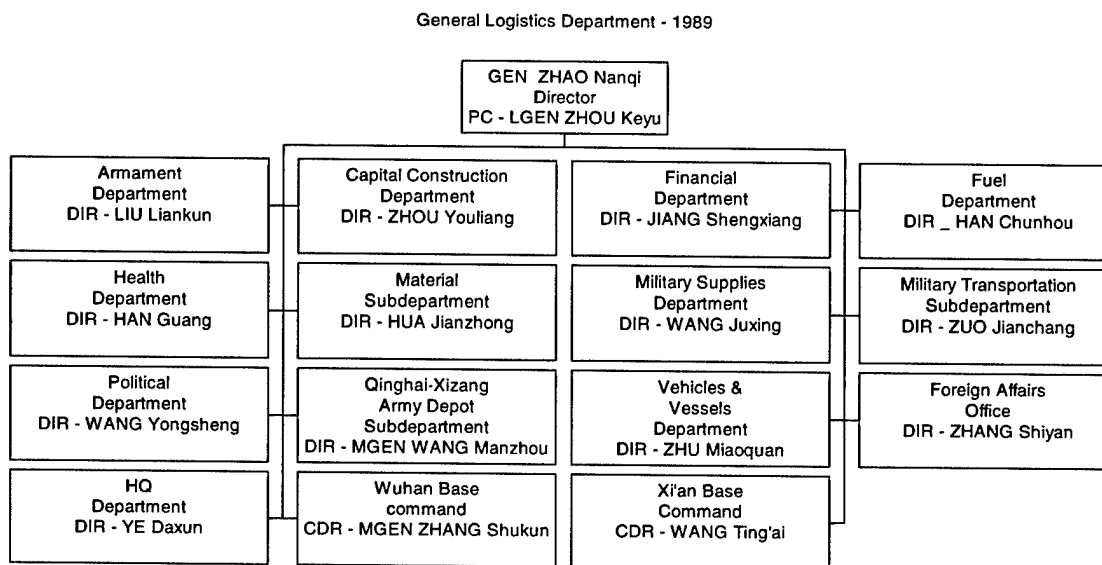


Figure 6.3, based on *Directory of P.R.C. Military Personalities*, Defense Liaison Office, U.S. Consulate General, Hong Kong, 1989, pp. 27-29.

1990-Gulf War; Taiwan Exercises (1995-96)

After the Tiananmen crisis in June 1989, the PLA logistics' traditional involvement in production and business significantly expanded, and the GLD staff grew accordingly to manage these highly diversified operations. In 1991 (Figure 6.4), the GLD had 20 subordinate elements: Armament Department, Capital Construction and Barracks Department, Finance Department, Fuel Department, Health Department, Material Department, Military Supplies Department, Military Transportation Department, Political Department, Qinghai-Xizang Army Depot Department, Vehicles and Vessels Department, Management Bureau, All-Army Land Management Bureau, Foreign Affairs Office, HQ Office, All-Army Birth Planning Office, Wuhan Base Command, Xi'an Base Command, Engineering General Unit, and Directly Subordinate Subdepartments.

Figure 6.4 General Logistics Department - 1991

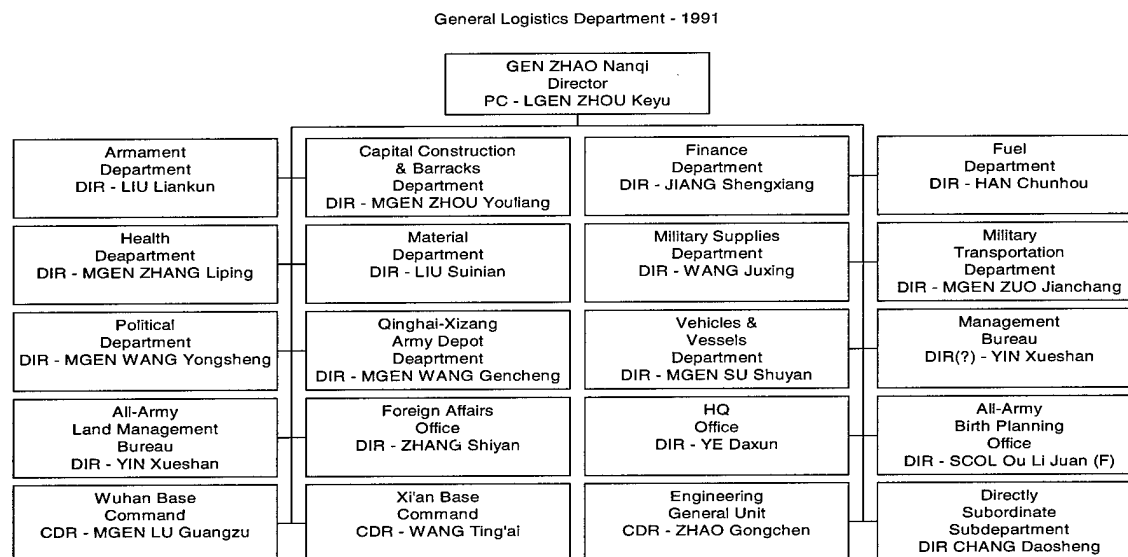


Figure 6.4, based on *Directory of P.R.C. Military Personalities*, Defense Liaison Office, U.S. Consulate General, Hong Kong, June 1991, pp. 20-23.

By 1994 (Figure 6.5), the GLD grew to 23 elements. Compared to the 1991 structure cited above there were several changes and additions. The Fuel and Material Departments were combined into the Material and Fuel Department, headed by Director Su Shuyan. The Military Supplies Production Department, Production Management Department, Army-Run Enterprise Bureau, Office in Shenzhen were added to manage the PLA's burgeoning business operations. The Military Mine Bureau, which oversees all precious metal exploitation, and Nenjiang Base were also added.

Figure 6.5 General Logistics Department - 1994

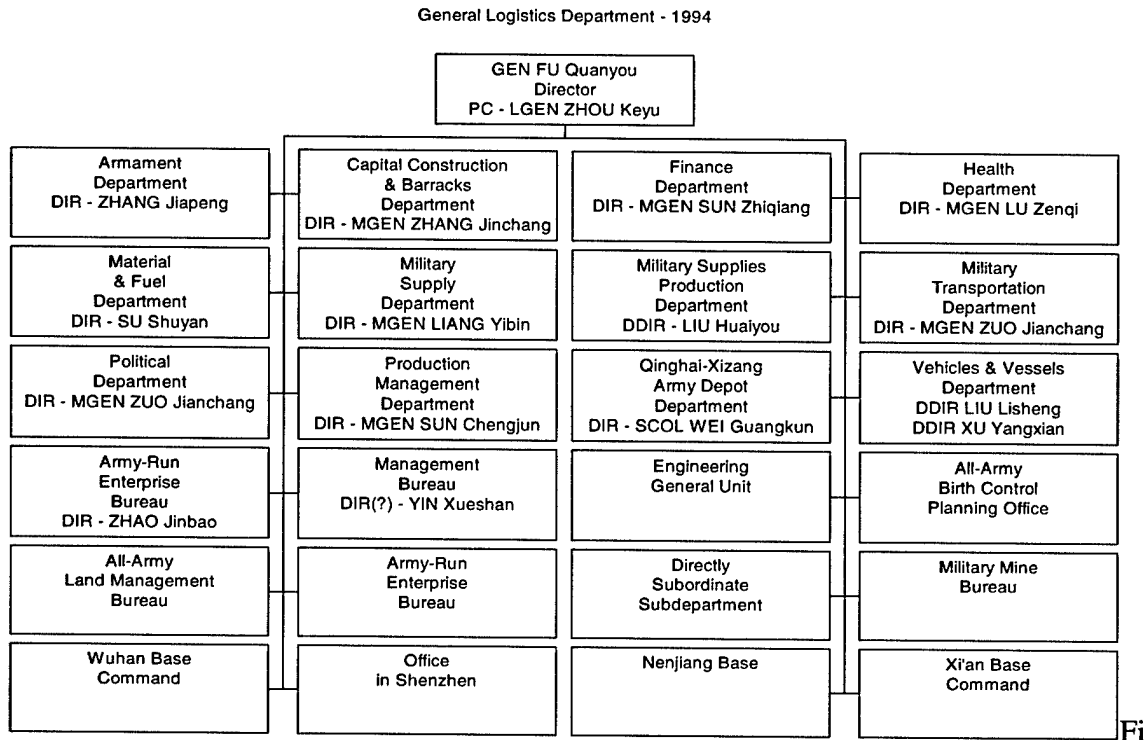


Figure 6.5 based on, *Directory of P.R.C. Military Personalities*, Defense Liaison Office, U.S. Consulate General, Hong Kong, October 1994, pp. 23-27.

Between 1995 (Figure 6.6) and 1996 (Figure 6.7), the GLD remained at 24 staff elements directly under GLD, but made some changes. First, the Military Mine Bureau appears to have been at least temporarily dropped from the GLD organizational chart. Second, a Headquarters Department (*Siling Bu*), under the Chief of Staff, Major General Yang Chengyu, was added. Also added was the Military Communications and Transportation Department (*Junshi Jiaotong Yunshu Bu*).

Figure 6.6 General Logistics Department - 1995

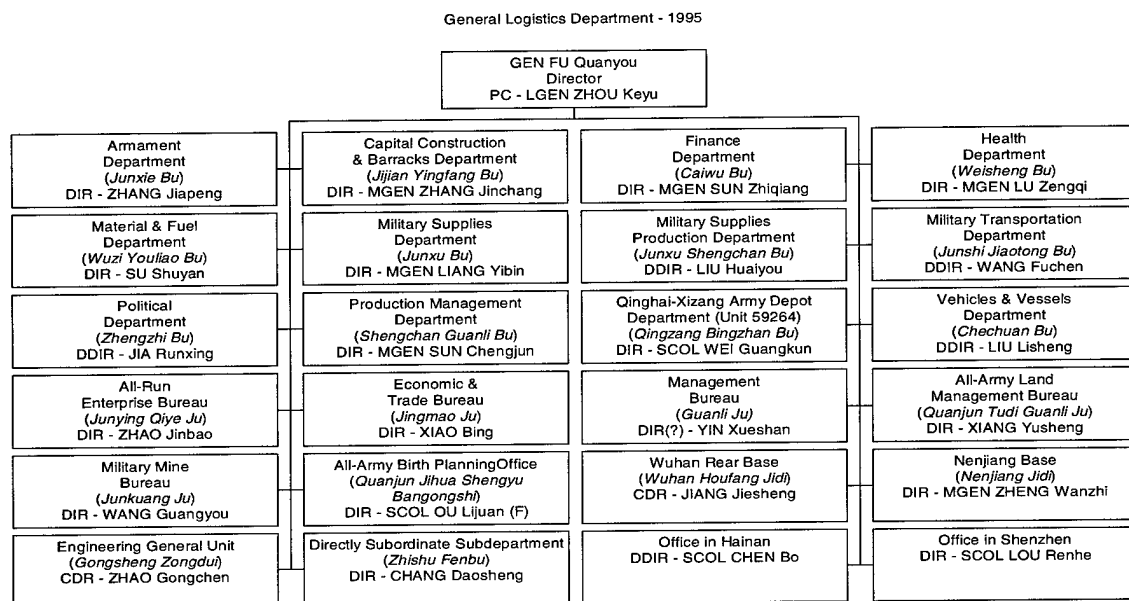


Figure 6.6, based on, *Directory of P.R.C. Personalities*, Defense Liaison Office, U.S. Consulate General, Hong Kong, October 1995, pp. 25-29.

Figure 6.7 General Logistics Department - 1996

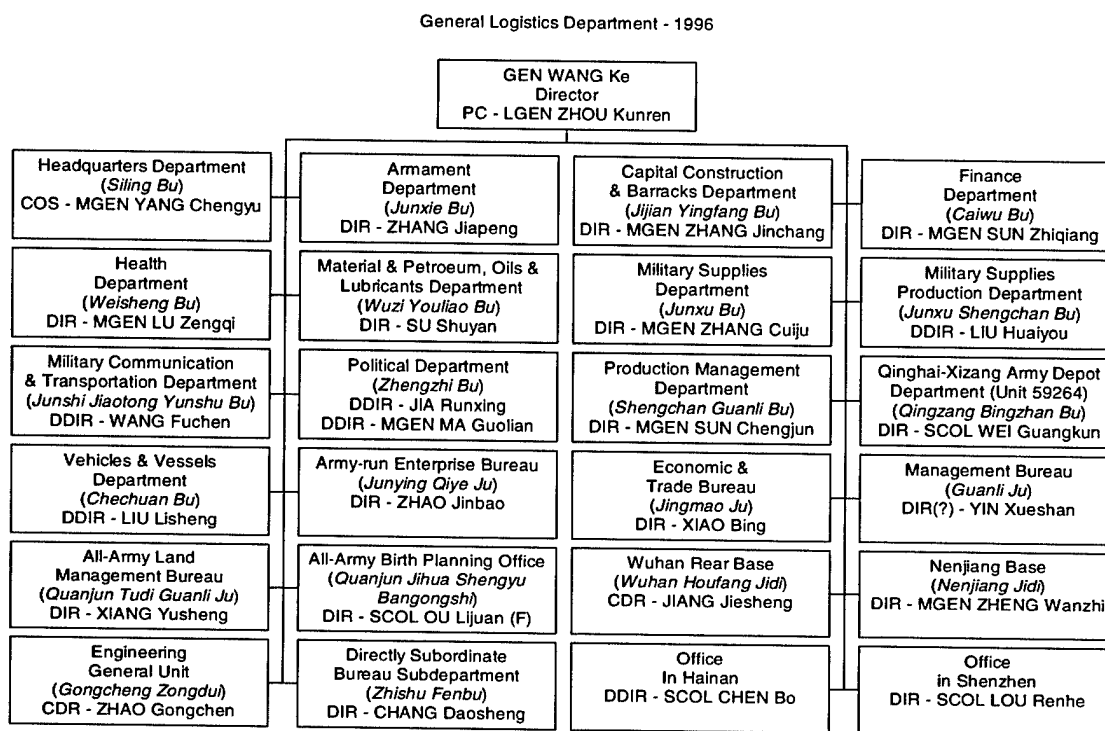


Figure 6.7 based on, *Directory of P.R.C. Military Personalities*, U.S. Consulate General, Hong Kong, October 1996, pp. 21-24.

In 1997 (Figure 6.8), on the eve of the order for the PLA to withdraw from business, the GLD, under General Wang Ke, reached a record size of 25 staff elements. Compared to 1996, the PLA General Hospital Number 301 was highlighted as a separate element of the Health Department. The Military Mine Bureau was once, again, shown as part of the GLD subordinate staff, but the Armament Department was removed.

Figure 6.8 General Logistics Department - 1997

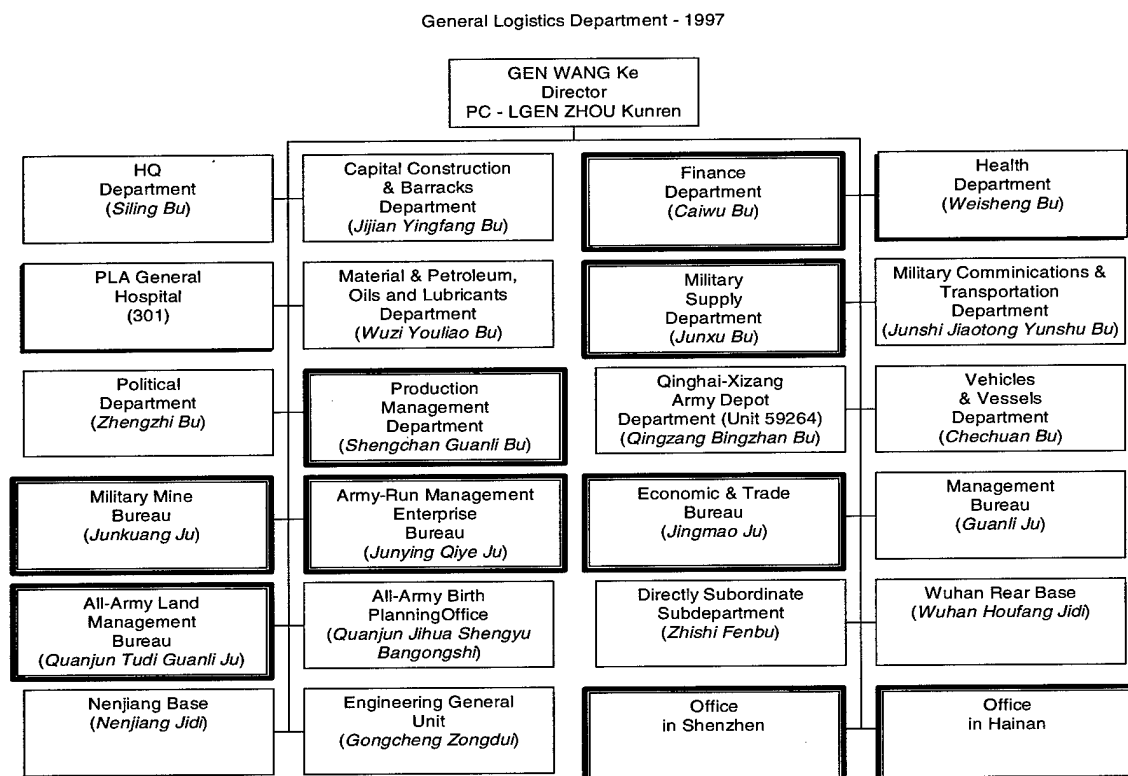


Figure 6.8, based on *Directory of PRC Military Personalities*, SEROLD Hawaii, Inc., Aiea, Hawaii, August 1997, pp. 25-27. Prominent business related staff are highlighted. See Mulvenon, *Soldiers of Fortune*.

In 1998 and 1999 (Figure 6.9), following the move to have the PLA withdraw from business, the GLD staff dramatically downsized back to early 1980 levels more consistent with its traditional span of control, although the Armament Department most likely remained under the newly created General Armament Department (GAD). Sixteen subordinate staff elements remained: the Headquarters Department, Capital Construction and Barracks Department, Finance Department, Health Department, PLA General Hospital (301) under the Health Department, Material and Petroleum, Oils and Lubricants Department, Military Supplies Department, Military Communications and Transportation Department, Political Department, Production Management Department, Qinghai-Xizang Army Depot Department (Unit 59264), All-Army Land Management Bureau, Military Mine Bureau, Wuhan Rear Base, Nenjiang Base, and the General Engineer Unit.

Seven staff elements associated with the megalithic PLA, Inc. that were eliminated included:

- Military Supplies Production Department (*Junshi Jiaotong Yunshu Bu*)
- Army-Run Management Enterprise Bureau (*Junying Qiye Ju*)
- Economic and Trade Bureau (*Jingmao Ju*)

- Management Bureau (*Guanli Ju*)
- Directly Subordinate Departments (*Zhishi Fenbu*)
- Office in Hainan
- Office in Shenzhen

The Vehicles and Vessels Department, which dated back to the early 1990s, may also have been removed from GLD, due to its business connection, or it may have been incorporated into staff elements within GAD.

The All-Army Birth Planning Office (*Quanjun Jihua Shengyu*), headed by Senior Colonel Ou Lijuan since its appearance in 1990, was also eliminated. This, however, had no effect on GLD command and control since it likely cut a non-operational and non-profitable administrative distraction.

Figure 6.9 General Logistics Department - 1998

General Logistics Department - 1998

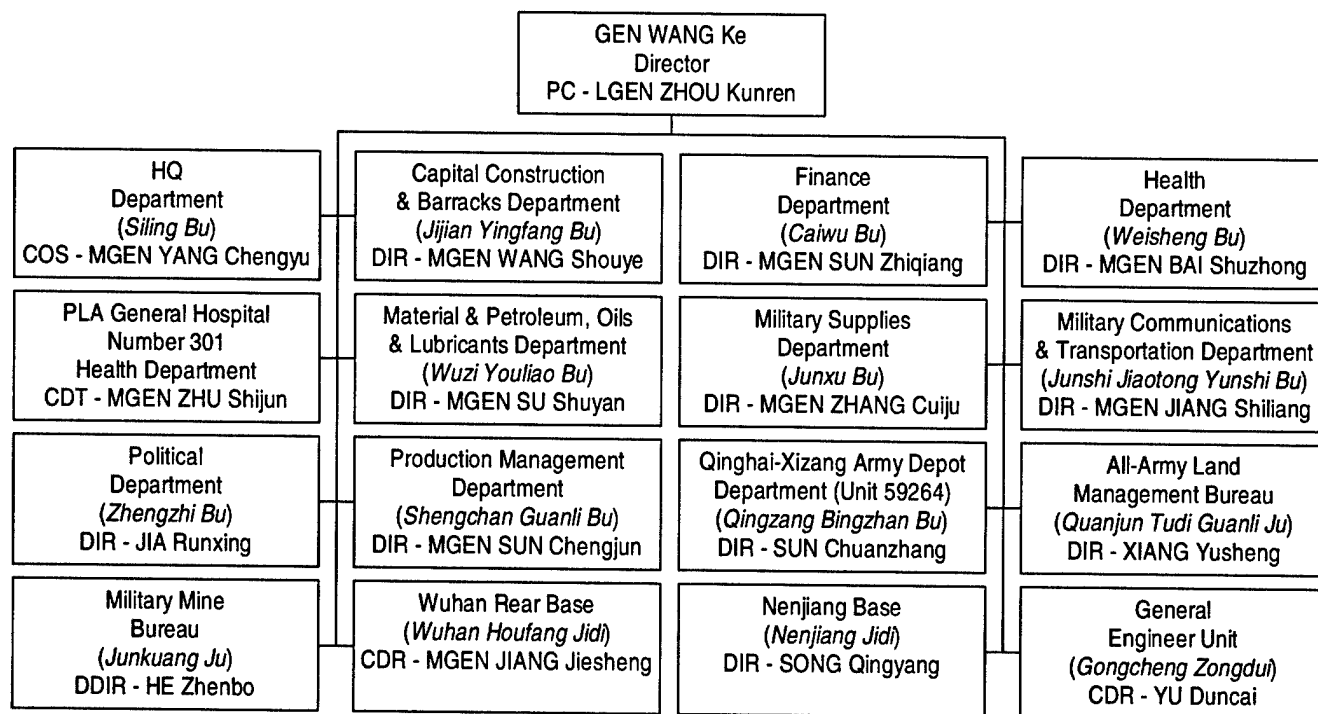


Figure 6.9, based on *Directory of PRC Military Personalities*, October 1998, pp. 24-28; and *Directory of PRC Military Personalities*, October 1999, pp. 24-25.

INTELLECTUAL INFUSIONS : EDUCATION AND TRAINING

Technological innovation, application, and production are essential to the transformation of the PLA's logistics into a modern joint logistics system. Without an indigenous production capability, however, foreign acquisition of technology and materiel can only

take the PLA so far. It may be possible to buy advanced materiel and equipment, but if operators and logisticians cannot provide adequate maintenance and sustainment, it will perform below its operational capability. Although this may prove good enough for a deterrent and/or response, the PLA clearly seeks to improve its logistics. Recognizing the importance of people to logistics innovation and high-tech efficiency and operations, the GLD has sent more than 2,000 people overseas to study in such areas as logistical command, medicine and health, logistical engineering, military economics, and linguistics. Since the early 1980s, over one half of all PLA people sent abroad to study have been sent by the GLD. They have been sent to over 30 countries, including the United States, Great Britain and Japan. In recent years, GLD scientists and technicians have also made over 6,000 trips overseas for academics exchanges and other short visits.⁶²⁸

Although the actual rate of return of GLD personnel who have studied abroad is not known, returned students and researchers have been credited with major contribution in military medicine, for example. One of China's historic challenges has been to effectively infuse the knowledge and experience of its returned intellectuals into its own modernization efforts. Too often returned intellectuals who could conduct advanced research and apply this to production and operations suffered sanctions upon return to China for their foreign connections, or were ignored. Even under the best of times, intellectuals often have found their research inhibited by poor working conditions, underfunding, and bureaucratic and/or political micro-management. If the GLD hopes to develop an effective joint support capability, it will have to depend upon its intellectual talent, as well as its increasing ties to civilian research institutions and universities to enhance its capabilities through experimentation and innovation. Its internal logistics academies (Figure 6.10) will also need to keep pace with advanced logistics technologies and methodologies, while developing indigenous solutions and innovations within its own conditions and capabilities.

⁶²⁸ Zhang Dongbo, Yuan Ansheng and Feng Xiaosong, "Chinese Soldiers Marching Towards the World – Feature on Personnel in General Logistics Department Who Return From Studies Abroad," *Xinhua*, 28 December 1999, in FBIS, 30 January 2000.

Figure 6.10 Military Logistics Academies and Universities

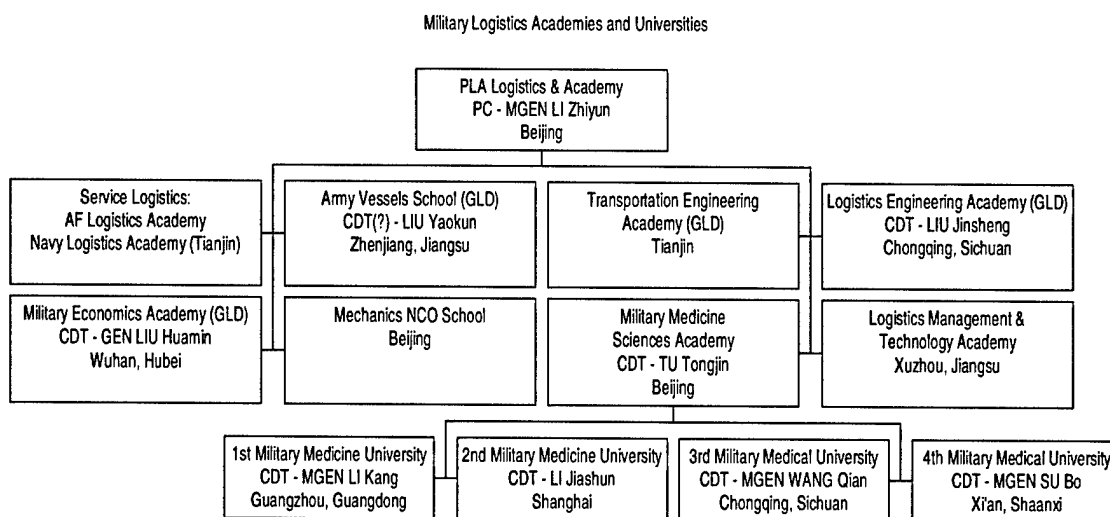


Figure 6.10, based on *Directory of PRC Military Personalities*, October 1999, pp. 201-211.

Chinese Military Diplomacy with Logistics Characteristics⁶²⁹

In addition to sending GLD personnel overseas to study, attempting to attract young intellectual talent into logistics work, and enhancing its ties to universities and relevant research institutes, the GLD, as part of an overall PLA diplomacy effort, has also actively sought to expand and deepen its understanding of advanced logistics operations through military-to-military contacts, such as functional exchanges and high level visits. General Wang Ke, Director of the GLD, and members of his staff have headed numerous logistics delegations to various countries, including the U.S. within the last several years. In addition, other members of the GLD have also been included in other visits. Delegation members are characteristically well versed and well prepared to learn from these visits. PLA personnel, including logisticians, characteristically ask very specific and insightful questions of their hosts that reflect a very specific and professional knowledge of all aspects of modern logistics within a high-tech environment.⁶³⁰

⁶²⁹ Kenneth W. Allen and Eric A. McVadon, *China's Foreign Military Relations*, Washington, D.C.: The Henry L. Stimson Center, October 1999, pp. 34-37.

⁶³⁰ Based on discussions and personal experience with PLA delegations between 1996-1998.

Some observers assert that logistics may be one of the most beneficial areas of the PLA's foreign military exchange program over the last ten years.⁶³¹ It has also become one of the most sensitive areas, since it can directly enhance the PLA's power projection capabilities. In combination with the GLD's research of military logistics information readily available on the Internet and elsewhere, as well as international logistics exhibitions that China has hosted in Beijing in 1987, 1993, and, most recently, in May 1998, the GLD has collected extensive information for consideration in carrying out its ten year logistics modernization program.

LOGISTICS STRATEGY AND DOCTRINE

"The focus of logistics support will shift from reliance on quantity to reliance on speed and information, making full use of the technologies of informationization and digitization and delivering an appropriate amount of resources to the front in the right place at the right time. The degree of precision of logistic support in terms of time, space, variety, quantity, and the deployment of strength becomes a sign of effective support." Cheng and Zhang, Logistics Command College, 2000⁶³²

After an initially stunned reaction, more sober assessments of the Gulf War in recent Chinese military writings have targeted deficiencies in U.S. logistical support. These analyses closely parallel American logisticians and operators own conclusions. Among the U.S. logistics shortfalls discussed in Chinese writings are: insufficient strategic mobility, high expenditure of munitions and other classes of supply, excessive time needed to establish sufficient stockage prior to start of operations, etc.⁶³³

Recognizing the operational and conceptual challenges of logistics support in a high-tech environment, but also understanding the realistic constraints the PLA's faces in modernizing its logistics support, reform since the mid-1990s has concentrated on increasing efficiency. To accomplish this, units have been exhorted to reduce or

⁶³¹ Allen and McVadon, pp. 35-36. See also *Xinhua* (English) on 25 and 28 May, 1998, regarding the China Military Logistics '98 Exhibition. Logistics '98 attracted over 300 companies from over 20 countries. Displays range from low-tech subsistence and other basic support items to high-tech equipment and materials. Like previous exhibition, the 1998 like the previous two, attracted numerous foreign logistics displays, ranging from low-tech subsistence to high-tech.

⁶³² Cheng Kuaile and Zhang Ping, "Precision-Oriented Logistics: Objective of [the] Logistics Revolution in the 21st Century, *Zhongguo junshi kexue*, 20 November 1999, translated in FBIS, 4 February 2000.

⁶³³ See Michael Pillsbury, "Weaknesses in [U.S. Military] Logistics," in *China Debates the Future Security Environment*, Washington, D.C.: National Defense University, 2000, pp. 73-83.

eliminate lingering business operations, through "socialization" (i.e., civilianizing). Under the goal of establishing a joint logistics system, some types of common support, such as medical, petroleum, and ground vehicle maintenance are being consolidated as joint support operations for all Services.

Chinese military writers have paid attention to the U.S. Army concept of "focussed" and especially the U.S. Marines' concept of "precision" logistics. These American concepts developed from recognition that it took far too long to build up stockage for the Gulf War, while some supplies were duplicated or wasted because of tracking difficulties, and port distribution was hampered.

Influenced by its revolutionary heritage and its post-1979 business involvement, the PLA is challenged to support overall economic development, provide for the basic needs and quality of life of the soldiers and officers, continue approved military production, as well as support operational joint logistics.

In April 2000, General Wang Ke article's entitled "Less investment, higher efficiency" ⁶³⁴ discussed the key requirements of PLA logistics under President Jiang Zemin's modernization guidance, in order to accomplish its multifaceted goals:

- Joint logistics of the armed forces
- Standardization of military supplies
- Monetary system of officers' welfare
- Socialized logistics supply system
- Scientific management of logistics

While logistics reforms stress the essential need to realize efficiencies and civilianize logistics, all these efforts are ultimately focussed on improving joint logistics support to combat operations.

In addition to making major changes to internal logistics operations and developing an effective logistics system, PLA military writers have also evaluated ways to maximize their efforts by exploiting potential vulnerabilities of more advanced militaries' logistics systems. Using the U.S. military logistics in the Gulf War as a case study for analysis, the PLA has assessed how a weaker power might defeat or deter a stronger power by applying tactics under a strategy of defeating the superior with the inferior (*yiruo shengqiang*).⁶³⁵

⁶³⁴ Wang Ke, "On Strongly Promoting Logistics Reform to Raise the Economic Efficiency of Our Armed Forces," *Zhongguo junshi kexue*, 20 April 2000, pp. 6-11, in FBIS, 20 April 2000.

⁶³⁵ See "Weaknesses in Logistics," pp. 73-83.

REFORMS AND RESTRUCTURING

Logistics Force Structure

In late 1999 General Wang Ke, GLD director, discussed the Central Military Commission decision to carry out a major overhaul of the PLA logistics system. The new structure integrates "fragmented logistics units" of the PLA Army, Navy, and Air force to provide regional joint support under the "joint battle zone logistics support" concept. Under the new joint logistics system, the "military regions' logistics departments and...branches...will be responsible for the unified supply of materials and...general services" to units within the three battle zones or where required. The joint logistics system is charged with providing "unified leadership, management, planning, construction, and use of...home-front facilities [such] as warehouses, hospitals and material stations" to support joint operations.⁶³⁶

Earlier in 1999, President Jiang Zemin signed the "PLA Joint Logistics Regulations," which was said to be "the single most crucial change in the PLA logistics support systems since the founding of the PRC." This system, which is the first time in its history the PLA will practice "joint logistics." By the end of 1999, General Wang Ke announced the PLA had reduced "7,600 military logistics forces" through a redistribution of logistics tasks in 850 units, which resulted in a savings of 80 million yuan.⁶³⁷

ROLE AND INFLUENCE OF THE GENERAL LOGISTICS DEPARTMENT

"Logisticians are 'unheroic, spineless, and sterile'." Hong Xuezhong⁶³⁸

The role and influence of logistics operations and leaders within the PLA has been unique to the PLA's history and its special relationship as the ultimate guarantor of the Chinese Communist Party (CCP). In the history of other militaries, such as the U.S., logisticians have played a secondary role to combat leaders. Logistics force structure is often the first to be cut or relegated to the reserves during budget cutbacks and force reductions, and significantly, no logistician has ever reached the level of Chief of Staff of the Army or Chairman of the Joint Chiefs of Staff. The role and influence of logistics within the U.S., consequently, has depended on the logistical awareness of combat leaders themselves.

Although an operational bias against logisticians also has existed in the PLA since its foundation, as Hong Xuezhong's quote above indicates, the influence of logisticians in

⁶³⁶ *Zhongguo tongxun she*, 23 February 1999, in FBIS, 28 February 1999.

⁶³⁷ *Xinhua*, 7 December 1999, in FBIS, 7 December 1999.

⁶³⁸ Shu, p. 171.

the PLA has been complicated by the interrelationship between the General Political Department's Political Commissar system and support. Up until at least the 1980s, leaders of the GRSD and GLD moved back and forth between political and logistics assignments. At the lower levels a core of younger technicians did develop, but these logisticians have yet to assume top-level positions.

The heritage of politicized logistics from the Red Army period until at least the Cultural Revolution provided GLD leaders with a considerable degree of political influence. There is no indication, however, that this was translated into more resources and support, as one might expect in a Western military. It may, however, have provided the basis for sustained tolerance, even enthusiastic support, of escalating and diversified business operations throughout the 1980s and 1990s, despite signs of abuse and corruption.

Since the late-1990s, Jiang's order for the PLA to withdraw from business has resulted in a dramatic cut to the GLD staff. More than one half of its headquarters has been eliminated or reassigned. The creation of the General Armament Department (GAD) and the loss of the GLD armament subdepartment may further reflect a decline in the GLD's power and influence. If this assessment is correct, it remains to be seen how durable and significant (either as help or hindrance) this downsizing and withdrawal from business will be for the GLD to lead the effort to develop effective joint logistics for combat operations within the next ten years.

The GLD will likely continue to play a key role in the military budget through the finance office. It will also remain involved in some types and levels of production, and will still be in a position to take advantage of some business opportunities as it socializes logistics functions.

The GLD already has made significant progress in improvements in quality of life, monetization, etc. that directly affect the morale and quality of the PLA officers and soldiers. Now the challenge is to revolutionize logistics support to combat for a regional high-tech war context.

CONCLUSIONS - IMPLICATIONS

The weight of available information on the PLA modernization appears to support the prevailing analytical view that routinely stresses PLA weaknesses and shortfalls; perennial gaps between aspirations and implementation; and evolutionary (rather than revolutionary) change. Logistics is no exception. The unique link between logistics support and inefficient military and civilian state production, as well as the diversion of personnel and resources into self-sustainment, suggest that PLA logistics will be severely challenged to develop an effective joint logistics system within the next ten years. We should not count PLA logistics out of the high-tech support game just yet, however. The PLA/GLD leadership is taking appropriate steps in the right direction to realize this goal.

Based on its history of flexibility, adaptation, and continual improvement, PLA logistics has the potential to ruin someone's day in a regional crisis, and to effectively ensure deterrence during peace. PLA logistics may not be able to support a decisive large-scale war without major additional investment, but the PLA may be more successful in developing a modest, modern conventional force projection capability.

The PLA leadership does appear to fully realize the military shortfalls. They also understand how future wars will be fought. While making major improvements to the force, they will aggressively search for shortcuts and/or vulnerabilities that their less advanced military can exploit. They also will continue to demonstrate a mastery of the psychological dimension of national security. While displaying some selective transparency, they will continue to conceal their strengths and weaknesses. They continue to reassure regional and global powers of their peaceful intentions and insecurities. They also, however, will keep people guessing about the PLA's actual and future potential to underwrite a credible deterrent.

In many ways, this is an excellent time for China to pursue regional and international security objectives. It can enjoy the benefits of a divided American polity, and rather benign assessments of China's military potential and capabilities. This period of uncertainty outside China's borders can provide China and the PLA with continued breathing space to address internal problems and continue to enhance its comprehensive strength.

For analysts of China's military, only hindsight may likely settle any argument over how successful China will be in achieving its military aspirations, and what this mean for the U.S. and its allies, as well as regional powers. In the end, the PLA, including its joint logistics support, will do what it can with what it has at whatever cost it takes. This may or may not prove to be enough at the time it is needed.

We do know, however, that the PLA actively seeks a high-tech military capable of fighting a regional war, if necessary. We know China combs the world for military knowledge, materiel, and equipment that will help it fight a high-tech war. We also know the PLA extensively studies the strategy and operations of world militaries, including the U.S., which it has at least indirectly identified as a future opponent. These in themselves warrant fresh investigation, reflection, and debate over the development of PLA military operations that seriously considers the implications of even limited and focussed success in the development of its joint logistics and combat operations.

APPENDIX A LEADERSHIP

Yang Lisan (1949-53)
Huang Gezheng (1954-56)
Hong Xuezhi (1956-59)
Qiu Huizuo (1959)
Zhang Zhen
Zhang Congxun (1975)
Hong Xuezhi (1980-87); also PC 'til 1987
Zhao Nanqi (1988-92)
Fu Quanyou (1992-94)
Wang Ke (1995-present)

The current director of the GLD, General Wang Ke, was born in 1931 in Xiaoxian, Anhui Province. He joined the CPC in 1947. Wang Ke has some political commissar experience. He was a deputy political instructor of the Third Field Army in 1949. He participated in the Jiaozhou-Jinan counter-attack and Huai Hai Campaign. He served as a battalion commander in the Korean War in 1953. In 1956 he served concurrently as the deputy commander and chief of staff of an artillery regiment of the CPV in 1956. After the Korean War he served in various artillery-training assignments in the Beijing area and Lanzhou Military Region, including political commissar of the garrison division from 1972-1978. He was granted the rank of Lieutenant General in 1988, and promoted to General by 1994. He was identified as the Director of the GLD in 1995. Wang replaced General Fu Quanyou, who was promoted to Chief of the General Staff. Unlike previous GRSD/GLD directors and General Wang Ke, General Fu official biography does not reflect any political commissar positions. He commanded from the company to the army level, and served in numerous chief of staff positions. He served in Korea as a battalion commander during 1953-56. See *Who's Who in China: Current Leaders*, Beijing: Foreign Languages Press, 1989, and *Directory of P.R.C. Military Personalities*.

7. THE GENERAL ARMAMENT DEPARTMENT⁶³⁹

By Harlan Jencks⁶⁴⁰

INTRODUCTION⁶⁴¹

The official creation of the General Armament Department (GAD) in April 1998 marked a significant change in the Chinese People's Liberation Army (PLA). The three-way division of the PLA High Command into the General Staff Department, General Political Department, and General Logistics Department has been an organizational constant in the PLA since 1957. The parallel division into headquarters staff, political, and logistical departments runs all the way down to regimental level throughout most of the PLA. Hence the introduction of a fourth General Department, with a new parallel staff system running down to regimental level was an important organizational innovation. The Air Force, Navy, and Second Artillery already had headquarters-level departments with comparable responsibilities; but even there, creation of the GAD provoked some significant organizational reshuffling.

Because it is less than three years old, the GAD is still establishing its organizational "turf." It was created from components of other military and non-military organizations, and acquired most of its responsibilities, personnel, and assets at their expense. Not surprisingly, it is still competing with a civilian organization—the State Commission of Science, Technology, and Industry for National Defense (SCOSTIND)—

⁶³⁹ The opinions expressed herein are those of the author, and do not necessarily reflect the views of Lawrence Livermore National Laboratory or any of its sponsors.

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⁶⁴¹ For their insights, observations, and assistance, I am indebted to Kenneth Allen, Dennis Blasko, Arthur Ding, David Finkelstein, John Frankenstein, Iain Johnston, Richard Latham, John Lewis, Evan Medeiros, Ellis Melvin, Jonathan Pollack, Wen Hsu, and Xue Litai; as well as a number of others. Especially, I wish to express my profound admiration and gratitude to Ellis Melvin.

and with other parts of the PLA. The GAD is pushing itself into areas of responsibility previously controlled by the former Commission of Science, Technology, and Industry for National Defense (COSTIND), and by the PLA General Staff and General Logistics Departments. The contradictions and competition involved are discussed further in the section on "Decision Making and Relative Power."

ORGANIZATIONAL HISTORY, AND EMERGING ROLES AND MISSIONS

At the Ninth National People's Congress (9NPC) in March 1998, Premier Zhu Rongji ordered a radical restructuring of government and of the state-operated scientific and industrial systems, including the "Big Five" state-operated military industrial corporations. Among the leading state organs formally abolished was COSTIND.⁶⁴² Since its creation in 1982, COSTIND had occupied a unique position in the government of the People's Republic of China (PRC), with one organizational foot in the civilian defense scientific, and industrial complex directly under the State Council, and the other in the PLA directly under the Party Central Military Commission (CMC). COSTIND was charged with coordinating and mediating the often contradictory requirements and interests of the operational PLA, on one hand, and the defense scientific-industrial system on the other. It was supposed to supervise the research, development, testing, and evaluation of all new PLA weapon systems and equipment; but it never fulfilled these responsibilities very successfully. The PLA had to buy what was built, and had little input into the design or procurement processes. This not only kept the PLA technologically backward, it was inefficient and wasteful.

Confusingly, the 9th NPC abolished COSTIND and then created a new "COSTIND"—with exactly the same name (in both Chinese and English). Through 1998, this reuse of the organizational title added confusion to an already murky picture. While "old COSTIND" continued to function well into the summer of 1998, "new COSTIND" attempted to get its organizational act together. Where the identification might be in doubt, this study refers to "State COSTIND" or "SCOSTIND" (which is solely under the State Council) to differentiate it from "old COSTIND" or "former COSTIND" (which was under both the State Council and the CMC).⁶⁴³

SCOSTIND was supposed to assume the former COSTIND's functions of governmental regulation of defense industrial management, and take over the State Planning Commission's Defense Department (*guofangsi*). It also was to take direct control of the "Big Five" military industrial corporations under the State Council, and supervise their restructuring. (See Sidebar)

⁶⁴² Harlan W. Jencks, "COSTIND is Dead, Long Live COSTIND! Restructuring China's Scientific, Technological, and Industrial Sector," in James C. Mulvenon and Richard H. Yang, eds., *The People's Liberation Army in the Information Age*, Santa Monica, CA: RAND Corp., CF-145-CAPP/AF, 1999, pp. 59-77.

⁶⁴³ Most reports have simply used the term "COSTIND" and left it to the reader to deduce which organization is meant. The issue is no longer in doubt; Any reference to "COSTIND" after July 1999 refers to the new State COSTIND (SCOSTIND).

Sidebar: THE "BIG FIVE" BECOME THE "BIG TEN"

Prior to March 1998, there were five huge state-owned defense industrial corporations, which produced the vast majority of China's military arms and equipment. These so-called "Big Five" were:

China National Nuclear Corporation (CNNC)

Aviation Industries of China (AVIC)

China Ordnance Industry Corporation (COIG, better known as NORINCO)

China State Shipbuilding Corporation (CSSC)

China Aerospace Industry Corporation (CASC)

The March 1998 reorganization was intended, in part, to correct the chronic indebtedness, massive overstaffing, and bureaucratic unresponsiveness of state-operated enterprises (SOEs). However, "restructuring" in 1998-99 produced little real change. On 1 July 1999, Premier Zhu announced the formal reorganization of the former "Big Five" military-industrial SOEs into ten new Industrial Enterprise Groups (IEGs). Contrary to the March 1998 directive to organize competing IEGs that would sink or swim in the free market, Zhu twice said the new structures would promote "moderate competition." Yet there hardly can be even moderate competition, since each of the "Big Five" merely divided into two IEGs, each of which continues to monopolize one or more product lines.

CNNC has been reorganized as:

China Nuclear Industry Group Company (CNNC)

China Nuclear Industrial Construction Group Company (CNEC)

AVIC has been reorganized as:

China Aeronautics Industry First Group Company (AVIC-1)

China Aeronautics Industry Second Group Company (AVIC-2)

COIC has been reorganized as:

China Ordnance Industry Group Company (COIGC)

China Ordnance Equipment Industry Group Company (COEGC)

CSSC has been reorganized as:

China Shipbuilding Industry Group Company (CSIGC)

China Shipbuilding Heavy Industry Group Company (CSHIGC)

CASC has been reorganized as:

China Astronautic Science and Technology Group Company (CASTGC)

China Astronautic Mechanico-Electronic Group Company (CAMEGC)

In July 1999, Zhu said that a major future task is to "step up the pace of restructuring," indicating that detailed reorganization of the new "Big Ten" still

remains.⁶⁴⁴ Yet, at the NPC session of March 2000, SOE reorganization was scarcely mentioned.

End of Sidebar

The Demise of COSTIND and Rise of the GAD

In November 1996, former COSTIND director Ding Henggao was replaced by Lieutenant General Cao Gangchuan, formerly First Deputy Chief of the PLA General Staff. Cao probably presided over the demise of COSTIND with a good deal of satisfaction. Having devoted most of his career to the PLA's modernization and acquisition process, he was one of those PLA leaders who were frustrated and angered by COSTIND's chronic failures.⁶⁴⁵

Officially created in March 1998, SCOSTIND got off to such a poor start that it might never recover. Well into 1999, it remained ineffectual and invisible, particularly compared to the PLA's assertive new General Armament Department. Formally, the GAD should rank below SCOSTIND. As a Commission of the State Council, SCOSTIND formally ranks higher than a ministry—two full steps above a PLA General Department. Moreover, the GAD was not announced until 5 April 1998,⁶⁴⁶ so it is "younger." Yet, Chinese sources consistently list GAD ahead of SCOSTIND. In a culture where prestige and "face" are crucial—where even common folk instinctively note the rank order of names and faces in news releases and photographs—this consistent slight is not accidental. Perhaps most humiliating of all was the official guest list for the 1 July 1999 announcement of the new "Big Ten" Industrial Enterprise Groups. Both Beijing Central Television and Xinhua News Agency listed General Cao ahead of Liu Jibin, Minister in charge of SCOSTIND.

Sidebar: WHAT'S IN A NAME?

According to Chinese officers, The General Armament Department (*Zong Zhuangbei Bu*) was modeled to some degree on the French *Délégation Générale pour l'Armement (DGA)*. This helps explain why official Chinese sources, like Xinhua News Agency's English language service, fairly consistently call it the "General Armament Department," (or occasionally "General Armaments Department").

The Department's Chinese name, *Zong Zhuangbei Bu* (STC: 4920 5944 0271 6752), literally translates as "General Equipment Department (GED)." "GED" sometimes appears in official publications, and is frequently used by foreign translators, including

⁶⁴⁴ Beijing Central Television, 1 July 1999; and *Renmin ribao* [People's Daily], 1 July 1999.

⁶⁴⁵ On COSTIND failures, see Benjamin C. Ostrov, *Conquering Resources: The Growth and Decline of the PLA's Science and Technology Commission for National Defense*, Armonk, NY: M.E. Sharpe, 1991.

⁶⁴⁶ South China Morning Post, 6 April 1998.

the English language press in Hong Kong, and the United States' Foreign Broadcast Information Service (FBIS). In all cases, including this chapter, the terms "General Equipment Department," "GED," "General Armament Department," "General Armaments Department," and "GAD" all refer to the same organization.

End of Sidebar

In the first weeks of the reorganization in 1998, old COSTIND gave up all its military personnel (including General Cao) to the new GAD, along with its most prestigious and profitable assets. The GAD took over China's leading overt collector, translator, and publisher of technical intelligence, the China Defense Science and Technology Information Center (CDSTIC), as well as all the former COSTIND test ranges and facilities (including the satellite launch bases at Xichang, Sichuan and Taiyuan, Shanxi; and the nuclear test site at Lop Nur, in Xinjiang). GAD also took over many of old COSTIND's teaching and research institutions, including its Command Technical Academy and the Aerodynamics Research and Development Center.⁶⁴⁷ Reportedly, GAD also took over old COSTIND's main import-export firm, Xinshidai Company (a.k.a. New Era Company).

Although it established itself much more quickly and effectively than State COSTIND, the GAD's early months were not without problems. In addition to assuming control of the former COSTIND assets mentioned above, GAD took over various parts of other PLA Departments, including some functions and units of the General Logistics Department. It took over the General Staff Department's arms export control responsibilities; in addition to its Bureau of Military Equipment and Technology Cooperation (BOMETEC), which oversees foreign military aid and sales from PLA stocks. Perhaps most importantly, GAD took over most missions and personnel of the GSD Equipment Bureau (responsible for ground forces and general-purpose equipment development) and of the GSD "Military Services Department" (*bingzhong bu*) responsible for Air Force, Navy and Second Artillery equipment development. (See Table 7.1)

Each of these diverse elements brought along its own organizational culture, preferences, and agendas, as well as its own networks of personal relationships (*guanxi*). GAD reorganization was behind schedule in September 1998, with only a few senior positions filled. The relationship between PLA officers formerly with COSTIND vis-a-vis those formerly with the GSD and GLD must have been particularly strained. Moreover, in 1999 the GAD began encroaching on the GLD's logistics functions. (see below).

In late 1998, PLA leaders told foreign visitors that whereas research and development (R&D) had been separate from procurement under the old COSTIND system, GAD now would combine them. "Integrated management and production" under the GAD was to be modeled after the "General Armaments Bureau in France" (*Délégation Générale pour l'Armement*). GAD would be responsible for the whole process of arms production, from "research to testing to production to deployment to

⁶⁴⁷ Personal communications, May 1999 and August 1998.

retirement to replacement, as well as spare parts." The reorganization also would introduce "competition" and a bidding system into the procurement process.⁶⁴⁸

The division of functions, roles, and missions between the new SCOSTIND and GAD is still not entirely clear. GAD officers indicate that they are responsible for "purely military equipment," in contrast to SCOSTIND, which is responsible for "civilian industry." Similarly, Liu Jibin, the director of SCOSTIND, has indicated a strong emphasis on production of civilian goods and services. Nevertheless, after more than two years of official existence, GAD roles and missions still impinge on those of others.

MANUFACTURING FACILITIES

In 1998, there was a good deal of speculation as to whether or not the GAD would exercise direct control over certain particularly important military manufacturing operations. Multiple sources have reported that the nuclear weapons manufacturing facility in Sichuan ("Special Parts Factory" or "903 Factory") was transferred to the China National Nuclear Corporation (CNNC) early in the reorganization.⁶⁴⁹ Surely, one would think, if the GAD were going to retain control of just one factory in all of China, it would have been that one. On the contrary, however, the GAD did retain direct control of some "purely military" manufacturing plants that were formerly run by old COSTIND. There is virtually no information about these plants, indicating that they may produce secret or particularly sensitive equipment.

MISSIONS AND PRIORITIES

GAD officers speak of their responsibility for "comprehensive equipment management" over the "full life cycle" of equipment. The GAD is responsible for the research and development of "key state armaments projects," but mainly as a supervisor and contractor. Most of the actual work at the "front end" of the process (i.e., research, development, and production) will be done under contract, not by the GAD. The GAD is also responsible for "ordering, purchasing, management, repair technology, and support." This work is done by the GAD headquarters and by the subordinate Armament Departments of PLA units.

On 1 December 1998, Cao Gangchuan laid out his "three future work priorities" at the All-Army Equipment Conference:

1. "We are giving key place in our equipment work to the building of our legal system...aimed at governing and managing equipment by law.
2. "We are...strengthening our armed forces through science and technology.

⁶⁴⁸ Personal e-mail communications, 15 December 1998.

⁶⁴⁹ Personal communications, 7 August 1998 and, August 1999; and Hu Side presentation at Stanford LINAC, 16 June 1998.

3. "We are ...focusing our equipment management on converting new equipment into combat might, making the development of quality talent a very pressing ...mission."⁶⁵⁰

A year later Cao claimed that, "Weaponry cost management levels and use effectiveness have been markedly enhanced." In his speeches, he repeatedly invoked the formula of "turning new weaponry into combat strength," emphasizing the depth of PLA frustration at the old system's failure to get weapons into production and into the hands of the troops.⁶⁵¹

Contracting and Market Competition

Under the pre-1998 system, there was essentially no competition in the military-industrial sector; therefore little incentive to innovate, or to operate efficiently or quickly. In certain respects, the old system was also disadvantageous to military industry. The PLA acquired weapons at highly subsidized prices and industrial enterprises simply had to absorb the losses—which were then compensated by subsidies from the state (in the form of non-recoverable loans from state banks). This is one of the reasons why the official defense budget was only half or a third (or even less) of actual PRC military expenditures. Competitive bidding was promoted in 1998, and recommended by Finance Minister Xiang Huaicheng in his March 1999 budget report to the NPC.⁶⁵²

Under the new system, the GAD contracts with civilian industrial organizations (the "Big Ten," et al.) and is expected to pay market prices. That means the official military budget will have to be considerably larger than in the past. Recent increases in the PLA budget may just be a larger proportion of actual military expenditure than we have seen before, rather than an actual increase.⁶⁵³

The most detailed endorsement of PLA commercial contracting was published in February 1999. "Big Five" reorganization was still undecided, but it was apparent that defense industry bureaucrats were successfully resisting "marketization." The Beijing rumor mill already indicated that there would be little competition in the "reformed" industrial sector. In that environment, *Jiefangjun Bao* (*Liberation Army Daily*) published a long article entitled, "Comprehensively Promote Socialization of General Equipment

⁶⁵⁰ Quoted in Hong Kong *Kuang chiao ching*, No. 316, 16 February 1999, pp. 30-31, translated in FBIS, FTS19990126000945.

⁶⁵¹ "All Army Weaponry Work Conference Convened in Beijing," *Jiefangjun bao* [*Liberation Army Daily*, hereafter cited as *JFJB*], 4 November 1999, p. 1; and "All Army Armament Work Conference Held in Beijing," *Xinhua*, 2 November 1999.

⁶⁵² "Government Procurement Again Recommended at NPC," *Xinhua*, 8 March 1999.

⁶⁵³ Bruce Gilley, "Stand-Down Order," *Far Eastern Economic Review*, 10 September 1998.

Supply.”⁶⁵⁴ In this particular article, the euphemism “socialization of supply” clearly meant the same as “marketization.”

Inter alia, the article noted that *information* is critical to monitoring a healthy, open market system. It also noted that *capital* is an effective lever for state (read: PLA) participation in the market. The state exerts an influence when it purchases goods, or invests in research, planning, production, and maintenance. Moreover, used military equipment is returned to the market (a procedure which evidently has been practiced for a long time).

Liberation Army Daily approvingly noted the use of competitive bidding and commercial contracting by foreign military forces. It cited the example of the United States, which in 1996 contracted with private companies for “90% of its military products, including aircraft, guided missiles, air defense weapons, and ammunition.” This is possible, said *JFJB*, because of a market economy regulated by competition. “Before the production of military equipment, the best research unit and manager...are chosen through competition, which raises the research and production level, and the quality and rate of success.”⁶⁵⁵

At this writing, Premier Zhu’s effort to introduce market principles and to force competition among state-operated industrial enterprises appears to have failed. The PLA will seldom pay “market prices” for weapons and equipment, because there still is no market competition for major defense industrial products. Contrary to the expectations and the directives of March 1998, the “reorganization” of the “Big Five” industrial enterprises, as seen in the above sidebar, was mostly cosmetic. The “Big Five” were reorganized into the “Big Ten,” but none of the ten is in serious competition with any other. Unless it goes to foreign suppliers, the PLA can only buy transport planes from AVIC-2 and warships from CSIGC; etc.

In its 1998 conception, the division between SCOSTIND and the GAD was roughly that GAD would be responsible for research and development of “purely military equipment,” whereas SCOSTIND would preside over the industrial enterprises which would contract with GAD to produce those products. In briefings later on in 1998, GAD officers indicated that both GAD and SCOSTIND would engage in research and development. The various industrial enterprises under SCOSTIND will continue to do R&D on new products and services, both for the commercial market and for the PLA. However, they are to do so on a commercial basis. Having developed a process or a piece of equipment, it supposedly will be up to the enterprise to sell it to the PLA.

In contrast, critically important items, which the PLA believes it absolutely must have, can be developed by military research institutions directly under the GAD and the PLA service arms. In some critical product areas, these even can be produced by GAD factories. A lever the GAD has to force civilian industry to strive for better and cheaper

⁶⁵⁴ *Jiefangjun bao*, 9 February 1999, p. 6.

⁶⁵⁵ *Jiefangjun bao*, 9 February 1999, p. 6. The PLA obviously does not realize how US procurement really works, and the problems we have had with reform. See the various works of Jacques Gansler on this issue.

products is that the GAD is authorized to procure foreign equipment and technologies if neither internal PLA nor civilian industry can provide them.

The 126 Program

A good indication of what is regarded as "purely military" high-technology was provided with the announcement of the 126 Program. "126" refers to the 26 January 2000 National Conference on Science, Technology, and Industry for National Defense, where the program was announced. The 126 program was signed into effect by Jiang Zemin, in his capacity as CMC Chairman, in early March 2000. It involves development, *primarily by the military itself*, of six major technology projects. This program is similar to, and follows up on, the 863 Program.⁶⁵⁶ The latter began in 1986, and was supposedly fulfilled in 1996, though it continues to be reported.⁶⁵⁷ John Frankenstein observes that the "126 program" looks suspiciously like a program outlined in a CDSTIC publication in the early 1980s—yet another example of the chronic failure of COSTIND and the defense scientific and industrial systems to produce what the PLA needed.⁶⁵⁸

The 126 Program consists of six major project areas and 35 specific projects. The six major projects are:

- Aerospace Technology
- Electronic Information Technology
- Strategic Defense Technology
- Deep-Strike Counterattack Technology
- Laser-Optic Technology
- Non-Conventional and Conventional Materials Technology

The entire program is under the direction of CMC Vice-Chairman Hu Jintao and is supposed to be fulfilled in 12 to 15 years. Under Hu's supervision, there is a 126 Program Committee chaired by Vice-Premier Wu Bangguo. Its members include Wang Zhongyu (Secretary-General of the State Council General Office), General Cao Gangchuan (GAD director), Liu Jibin (SCOSTIND minister), and others.⁶⁵⁹

⁶⁵⁶ On the 863 Program, see Evan A. Feigenbaum, "Who's Behind China's High-Technology 'Revolution'?" *International Security*, vol. 24, no. 1, Summer 1999.

⁶⁵⁷ For recent news, see <http://www.863.org.cn/publication/863n1201.html> (accessed 7 July 2000).

⁶⁵⁸ John Frankenstein, e-mail, "Additional comment on GAD paper," 13 August 2000. I am especially grateful to Dr. Frankenstein for his thorough critique of an earlier version of this study.

⁶⁵⁹ There have been a number of official announcements of the 126 Program. The most detailed, however, appeared in the Hong Kong publication *Tai yang pao*, 21 March 2000, p. A19.

Legal Provisions

An additional area of GAD concern in its first two years have been "armament-related legal systems building." At the All-Army Armament Work Conference of November 1999, General Cao said that "the work of building a legal system and weaponry work has been fully launched." A number of rules, regulations, and systems had been formulated, and the first book of "PLA Weaponry Regulations" was about to appear. He was probably referring to the "Weaponry Regulations" promulgated in early April 2000.⁶⁶⁰

General Cao even mentioned intellectual property rights (IPR) protection as an aspect of legal reform. It is extremely unlikely that IPR considerations will be allowed to inhibit the GAD's technical intelligence effort, but IPR may ameliorate the traditional PRC practices of "reverse-engineering" and un-licensed copying/modification foreign of equipment. Although "reverse-engineering" resulted in fairly successful copies and modifications of some 1950s-era Soviet equipment, the process has proven to be of diminishing utility vis a vis more modern and sophisticated gear. Accordingly, the Chinese may be coming around to the recognition that licensed tech-transfer often is more cost-effective than copying and "reverse-engineering."

Education, Training, and Careers

Still another area General Cao has heavily emphasized is technical training. In December 1999 he told a meeting of military academies in Beijing that it was "imperative to step up the training of qualified personnel."⁶⁶¹ According to the "Weaponry Regulations" of April 2000, "All armament and command personnel will be trained at the [GAD Command & Technical Academy in Beijing] before they become middle-ranking officers." This training will be in one of two specialties, either armament procurement and purchase, or armament management and maintenance.⁶⁶²

During 1999, a certain amount of modern equipment was acquired by the People's Liberation Army. As it was assigned to top priority units, and in the course of a major ground forces reshuffling, some relatively modern equipment was "cascaded" down to units which previously had much older equipment. This provoked a remarkable phenomenon. *Liberation Army Daily* reported that, "People long for new weaponry and equipment, yet when it arrives, they get scared." Some PLA units actually "locked up their new weaponry and equipment in the warehouse without touching it or using it, and have instead continued to train their troops with old weaponry and equipment and with the old methods of operation. This is mainly the result of lack of basic knowledge."⁶⁶³

⁶⁶⁰ "All Army Weaponry Work Conference Convened in Beijing," *Jiefangjun bao*, 4 November 1999, p. 1; and "All Army Armament Work Conference Held in Beijing," *Xinhua*, 2 November 1999.

⁶⁶¹ *Xinhua*, 10 December 1999.

⁶⁶² *Xinhua* in English, 11 April 2000.

⁶⁶³ "Enhance Foundation of Reinforcing Military with Science and Technology," *Jiefangjun bao*, 9 March 1999, p. 6.

General Cao is determined to change this. He and his senior officers have repeatedly invoked the slogan "It is better to have qualified people waiting for modern equipment than to have modern equipment waiting for qualified people."

Speaking at an Air Force Equipment Conference in January 2000, Cao said that once equipment is deployed to units, "Keeping up the talent for use management and maintenance support and bringing it up to combat capability by the set deadlines and keeping it combat ready will all mean that we definitely need to treat talent development as a top priority" and establish the idea that "talent is capital." He called for "diverse steps...to create a good climate for talent to show forth.... to steadily develop and keep key officers with real talent and academic achievements."⁶⁶⁴

In the summer of 1999, Jiang Zemin signed a decree consolidating a dozen or more PLA schools into four new university-level educational institutions, two of which may now belong to the GAD. One is the PLA Information Engineering University, which combines the former Institute of Information Engineering, Electronics and Technology College, and Survey and Mapping College. The other is the PLA Science and Engineering University, which combines the former Institute of Communications Engineering, Engineering Institute of the Engineer Corps, the Meteorology Institute of the Air Force, and the General Staff Department's Number 63 Research Institute.⁶⁶⁵ Alternatively, one or both of these Universities may now fall under the purview of the General Staff Department's Military Training Department (See David Finkelstein's Chapter on the GSD). It is certain that the GAD inherited from former COSTIND the National Defense Science and Technology University in Chang'an, and the Command and Technical Academy in Beijing.⁶⁶⁶

Military Representatives Bureaus

To assure contract compliance and quality control at civilian factories and research institutions that are working on military projects, the GAD has a system of "Military Representatives" (*jundaibiao*). There are bureaus (*ju*) in large cities (e.g., the GAD Wuhan Military Representatives Bureau), probably controlled by the GAD's Army Equipment Research and Purchasing Department. PLA and local newspapers have identified Military Representatives Bureaus in Beijing, Shenyang, Changsha, Shanghai and Wuhan (See Table 2). Evidently, these GAD city bureaus supervise the area offices (*chu*) identified with the various service branches (e.g., the "GAD Engineer Corps Wuhan Area Military Representatives Office").⁶⁶⁷ There are Service Branch Area Military Representatives Offices in (at least) Wuxi, Fuzhou, and Baotou. Each of these is

⁶⁶⁴ "PRC CMC Member Cao Gangchuan Stresses at Air Force Equipment Conference...", *Xinhua*, 20 January 2000.

⁶⁶⁵ *Xinhua*, 2 July 1999.

⁶⁶⁶ Ellis Melvin, e-mail exchanges, summer 1999.

⁶⁶⁷ *Jiefangjun bao*, 24 December 1998

presumably supervised by a GAD City Bureau. There are also Military Representatives Offices and Military Inspection Teams in individual factories.⁶⁶⁸

There appears to be a variation to the Military Representatives system in the case of the three separate service arms which have Armament Departments of their own (i.e., Air Force, Navy, and Second Artillery). These have their own factory representatives, who may or may not be supervised or supported by GAD City Bureaus. In August 1999 a relatively detailed story about factory representatives of the Second Artillery did not mention the GAD or Military Representatives City Bureaus at all. *Liberation Army Daily* simply reported that the Second Artillery's Armament Department provides military representatives to factories producing Second Artillery equipment.

The *Liberation Army Daily* article said that formerly, all had not been well with the Second Artillery representative system (which no doubt existed under COSTIND, in the Bad Old Days), because many factory representatives were not qualified. There was no formal training school for them until training and classes were set up for them in 1998-99. In addition to schooling, the representatives had to have practical experience in equipment "life-cycle management" (*chuan shou ming guanli*). The Armaments Department of the Second Artillery had taken the initiative to "give full play to the role of military representatives and 'extended' their duties from just checking on orders and examining prices and quality of items to following the research and manufacturing of weapons" and checking follow-up technical services in troop units. Military representatives at plants were encouraged to engage themselves in the research and manufacturing processes, although it is difficult to imagine how they could do that without getting in the way.⁶⁶⁹

Foreign Acquisitions

The GAD is now a major purchaser of foreign military hardware and technology. Leading examples of foreign end-item purchases are well known and politically sensitive; for example, Sukhoi-27 fighters and *Sovremennii*-class destroyers from Russia, and the abortive Airborne Early Warning aircraft deal with Israel. Less-widely noted, but perhaps more important, are the purchases of components and technologies from foreign vendors; primarily from the former Soviet states and Western Europe, but also, through various subterfuges and front companies, from Japan and North America. Cao Gangchuan has been involved in a number of foreign interactions in 1998-2000. He accompanied CMC Vice Chairman Zhang Wannian to Russia in March 2000, along with a delegation that also included Liu Jibin, minister in charge of SCOSTIND.⁶⁷⁰ General Cao also participated in meetings with the Ukrainian Vice-Defense Minister in May 2000.⁶⁷¹

⁶⁶⁸ Ellis Melvin e-mail, 10 February 1999.

⁶⁶⁹ "A Number of Military Representative Have Joined the Ranks of Missile Experts," *Jiefangjun bao*, 14 August 1999, p. 8.

⁶⁷⁰ *Xinhua*, 3 March 2000.

⁶⁷¹ *Xinhua*, 31 May 2000.

STRUCTURE ACCIDENTLY

Getting Organized

The top-level organization of the GAD is depicted in Figure 7.1. There is some official information about GAD organization. In addition, it is safe to assume that the GAD follows well-established PLA organizational practices. For example, although official sources never refer to the Confidential Department, there is certain to be one in GAD Headquarters. It also is safe to assume that each of the GAD staff organizations described below has certain standard components, such as a General Office, a Political Department, and (usually) a Logistical Department and Confidential Department. According to official briefers, GAD headquarters has one center (*zhongxin*), one committee (*weiyuanhui*), two bureaus (*ju*) and at least eight departments (*bu*). Press reports and several informants disagree as to the precise names of some of these organs, and about their functions. *The following discussion of these headquarters organs and their responsibilities is highly tentative. Virtually everything in this section is subject to revision as more and better information becomes available—and as organizational boundaries are established within the GAD and among the GAD, the other General Departments, and SCOSTIND.*

Directly subordinate to the commander of the GAD are two special organizations: the China Defense Science and Technology Information Center and the Science and Technology Committee. Both of these organizations were inherited from the former COSTIND, and seem to have the same duties they had before. They appear to have brought over virtually all of their former personnel, and so include some of the few civilians in GAD Headquarters.

China Defense Science and Technology Information Center (CDSTIC)

The CDSTIC is primarily an overt intelligence agency, which systematically canvasses the world for scientific and technical publications. It has been characterized as a “giant vacuum cleaner,” in tribute to its assiduous acquisition of conference papers, scientific publications, advertising literature, and every other imaginable sort of technical information. It maintains a large library and translation service. According to a mid-1990s visitor, “The CDSTIC is a monument to open-source collection: their library has just about every military [magazine] in just about every language you could imagine.... And acres of microfilms: US Army [Field Manuals], American Chemical Society, etc., etc. Pretty impressive.”⁶⁷²

In addition to collecting, archiving, and translating, the CDSTIC disseminates information to relevant organizations in China’s scientific-technical-industrial complex. The CDSTIC had computer links all over the country as early as 1993. CDSTIC publishes the monthly magazine *China Defence Science and Technology Information* (*Guofang Keji Yaowen*) and several other domestic defense industry newspapers; as well

⁶⁷² Personal e-mail communication 1 July 2000.

as the Hong Kong magazine *CONMILIT (Xiandai Junshi)*, which is aimed at an overseas Chinese readership.

CDSTIC always has disseminated technology information without any regard to IPR, and will no doubt continue to do so.

The CDSTIC probably is involved in secret technical intelligence analysis, but probably is not directly involved in illegal or covert collection. CDSTIC probably houses most arms control and disarmament activities within GAD headquarters (See the discussion below).

Science and Technology (S&T) Committee (*Keji Weijuanhui*, or *Kewei* for short)

The former COSTIND S&T Committee continues to function as part of the GAD, and its membership appears to be roughly the same.⁶⁷³ Under the former system the COSTIND S&T Committee was "a highly autonomous body of leading military scientists and cadres of very high political and technical prestige. Its director, the physicist Zhu Guangya, held a bureaucratic rank equivalent to that of the COSTIND's director. This meant that Zhu could circumvent his nominal boss," and appeal straight to the CMC and State Council.⁶⁷⁴

According to Feigenbaum, General Qian Shaojun "exercised de facto oversight over the entire Chinese nuclear weapons R&D complex from his perch as director of the nuclear group" under Zhu's S&T Committee.⁶⁷⁵ The S&T Committee has a number of such "consultative groups." For example, in September 2000, aviation propulsion expert Liu Daxiang, who is an Academician of the Chinese Academy of Engineering, was described as "General Armament Department Science and Technology Committee Part-time Committee Member and Conventional Propulsion Expert Consultative Group [Member]."⁶⁷⁶

It is not clear whether the S&T Committee still has its former high degree of autonomy, for the organizational and political environments have changed. Since 1998 the research planning and budgeting processes may have opened somewhat to new players. Appearing at an official GAD gathering in November 1999, Zhu Guangya was named first on the guest list, only as a "leading comrade," but ahead of the GAD Deputy Directors.⁶⁷⁷ In February 2000 he was again first on a long and distinguished guest list, identified only as a Vice Chairman of the Chinese People's Political Consultative

⁶⁷³ Personal e-mail communication and Beijing interviews, March 2000.

⁶⁷⁴ Evan A. Feigenbaum, pp. 111-113.

⁶⁷⁵ Ibid.

⁶⁷⁶ Ellis Melvin, e-mail, 19 September 2000, citing Chinese Academy of Engineering web site.

⁶⁷⁷ "All-Army Weaponry Work Conference Convened in Beijing," *Jiefangjun bao*, 4 November 1999, p. 1.

Conference.⁶⁷⁸ Clearly, his prestige is undiminished—but it is not clear whether he retains his organizational clout.

In December 1998, the S&T Committee still retained its own Communications system. A *PLA Life* article reported on soldiers assigned to the S&T Committee Main Communications Station, which had at least four sub-stations in the Beijing area. *Jiefangjun Shenghuo* [PLA Life], December 1998. I am especially grateful to Ellis Melvin for this citation, and for his analysis of *kewei*. Its communication station presumably links the S&T Committee to the various GAD research institutions, and might still link it to the research institutions of the “Big Ten” (which are now nominally under SCOSTIND). If so, the S&T Committee may have a channel to by-pass both the SCOSTIND and GAD chains of command.

If the S&T Committee functions the same way under the GAD as it did under old COSTIND, it will be able to continue by-passing its nominal boss (Cao Gangchuan is a relatively junior general), with unpredictable but important consequences. Cao will no doubt attempt to assert his own authority at the expense of Zhu Guangya and Qian Shaojun, both of whom—though quite elderly—still are actively involved in the S&T Committee's work.⁶⁷⁹ The S&T Committee's leaders may be in a position to advance their own R&D agendas by exploiting the continuing competition between GAD and SCOSTIND. At this writing, it is unclear how (or whether) the S&T Committee functions, how much its membership has changed (if at all), and what its relative prestige and political access is, compared to the formal authority of GAD Director Cao.

In keeping with his oft-stated desire to put weapons R&D decisions into the hands of “war-fighters,” General Cao may very well attempt to push decision making about R&D projects and priorities down into the PLA arms and services. This would mean increased importance for the comparable science and technology committees within the Armament Departments of the Air Force, Navy, and Second Artillery headquarters.

Foreign Affairs Bureau (*Waishiju*)

In most respects, the FAB has similar functions in all PLA organizations. Its primary purpose is “barbarian handling.” It hosts foreign visitors; and takes the lead in organizing and escorting GAD officers traveling abroad. It also provides GAD guides and spokesmen to the foreign press and foreign scholars.

Currently, the FAB appears to be involved in a turf war between SCOSTIND and the GAD. Although the Chinese Academy of Engineering Physics (CAEP) is subordinate to the GAD in most respects, it still is subject to some degree of SCOSTIND supervision regarding foreign interactions. At the October 1998 ISODARCO Conference on arms control and non-proliferation in Shanghai, participants from CAEP said their attendance had to be approved by the SCOSTIND International Cooperation Department, which also had to approve their visa applications for foreign travel. SCOSTIND also appears to

⁶⁷⁸ “Cao Gangchuan Stresses Need to Strengthen Army Through Science and Technology,” *Xinhua*, 25 February 2000.

⁶⁷⁹ Personal e-mail communications and Beijing interviews, March 2000.

control CAEP representatives to Inter-Governmental Organizations and international activities, such as the Conference on Disarmament and the CTBT Preparation Conference. Possibly, this inefficient arrangement is justified as a measure to obscure CAEP's subordination to the PLA and provide a "civilian" fig leaf for CAEP scientists when they interact with foreign scientists.

The FAB also is a logical department to supervise the GAD's foreign military trade and aid activities. Accordingly, we can speculate that it controls BOMETEC and the GAD's foreign trading companies (if any). Despite the July 1998 directive to the PLA to divest itself of most commercial enterprises, GAD trading companies, both overt and covert, almost certainly do exist, to facilitate GAD's role in importing selected foreign equipment and technologies.

Initial reports that the GAD took over Xinshidai Company (a.k.a. New Era Company), old COSTIND's main import-export firm, have not been confirmed. In fact, Xinshidai still seems to be functioning under SCOSTIND.

Comprehensive Planning Bureau (*Zonghe Jihua Bu*),

The precise functions of the Comprehensive Planning Bureau are not known. Former COSTIND had a Comprehensive Planning Department (*bu*) and possibly SCOSTIND still does. The Bureau's responsibilities appear to overlap those of the GAD General Office, in that it is the organizational locus for "big picture" policy making and long-range strategy formulation. Adding to the mystery, its only reported sub-division is a Management Support Bureau (*guanli baozhang ju*).⁶⁸⁰ The Comprehensive Planning Bureau is probably involved in budget development, forecasting and lobbying; in which case the Budget Department is simply responsible for cost accounting and management.

General Office (*Bangongting*)

The Headquarters, Political, and Logistics Departments of the GAD are the same traditional three major components found in every PLA organization. The General Office includes the general staff offices responsible for operations and training. It probably exercises staff supervision over the educational and training organizations under the GAD, as well as GAD factories and research facilities. Where the functional line is drawn between its planning functions and those of the Comprehensive Planning Bureau is unknown.

Political Department (*Zhengzhi Bu*)

The Political Department carries out the normal staff political functions of indoctrination, motivation, and personnel security, as well as maintenance of personnel records. As in all PLA units, the political office and the political commissar are central to personnel management, career planning, promotions, demotions, and so forth—especially for officers.

⁶⁸⁰ *Jiefangjun bao*, 5 January 1999.

Political commissars have traditionally been responsible for personal security and operational security in the PLA, and political departments/offices have security sub-departments/bureaus. Commissars are also responsible for morale, welfare, and cultural activities.

Logistics Department (*Houqin Bu*)

The Logistics Department at GAD headquarters is responsible for the logistical support of the GAD itself, and probably has staff responsibility for the logistical support of subordinate organizations and activities, including educational and research organizations. One source refers to the "Logistics and Depot Department," which suggests that the GAD maintains a system of supply depots separate from the depots of the General Logistics Department. The current conflict between the GAD and the GLD over roles and missions is discussed further below, in the section on Decision Making and Relative Power.

Department of Electronics and Information

This is the only GAD department charged with specific technologies, which emphasizes the importance attached to electronics and information technology by China's military leaders. Nevertheless, the department's mandate is not entirely clear. It definitely is responsible for military earth satellites; including R&D and some actual manufacture. This department also seems to be in charge of both R&D and production of certain other high-priority specialized electronic devices and technologies. Examples mentioned by various observers include laser applications and cryptologic technologies and equipment.

Department of Service Arms Equipment

The Department of Service Arms Equipment was formed from most of the former Service Arms Department (SAD, *bingzhong bu*) of the General Staff Department. It appears that the old SAD was split up, with most of it going to the General Armament Department, and a vestigial SAD remaining in the GSD. The latter probably is charged with determining equipment and technical requirements, which are then passed on the GAD in the form of directives. The General Staff Department also retains its responsibilities for operations and training.

The GAD Department of Service Arms Equipment oversees the development of equipment and armaments that are unique to the Air Force, Navy, and Second Artillery, each of which has an Armament Department (AD) and research institutes of its own. In addition, this department oversees the development of specialized equipment for the armored forces, field artillery, army aviation, military engineers, antichemical troops, signal troops, transportation troops, et al. It is clear from press reporting that the Department of Service Arms Equipment has staff responsibility for the PRC Space program, which extensively overlaps the personnel, technologies, and R&D institutions of the Second Artillery.

Because the old SAD probably constituted the largest single sub-department of the General Staff Department, the latter probably did not give it up easily. Moreover—because the GSD is by far the most prestigious of the general departments—SAD officers

who were transferred to the new GAD in 1998 resented their loss of status and tended to look down upon officers transferred in from "lesser" parts of the PLA.

Army Equipment Research and Purchasing Department

The Army Equipment Research and Purchasing Department, as its name implies, is responsible not only for ground force equipment R&D, but also for purchasing equipment from Chinese and foreign suppliers. It probably presides over the system of military factory representatives, and over some dedicated research institutes.

Since it is the only department that has the word "Purchasing" in its title, it appears to be the organization responsible for purchasing most PLA weapons, plus whatever equipment is not purchased by the GLD.

The title of this department implies that the Air Force, Navy, and Second Artillery have considerable autonomy with respect to their own equipment research and purchasing.

Joint Equipment Maintenance Department

In December 1998, GAD briefing officers referred to a "Technical Support Department." However, on 14 February 1999, *Liberation Army Daily* referred to it as the "General-Purpose Equipment Support Department" (*Tongyong zhuangbei baozhang bu*)⁶⁸¹ it appears that the name was changed (again?) after the Central Military Commission promulgated "PLA Joint Logistics Regulations" in the summer of 1999 (see below). The 1999 edition of the official *World Military Yearbook* (*Shijie Junshi Nianjian*) appears to refer to the same GAD department as the "Joint Equipment Maintenance Department" (*Zhuangbei Jishu Hezuo*).⁶⁸² These alternate names all imply that this department has staff responsibility for the technical support of equipment common to all of the PLA. The precise scope of that "technical support" is not clear.

Neither is it clear what is defined as "general-purpose equipment" or "joint equipment." The definition presumably excludes major weapons systems that are unique to the three separate arms (e.g., fighter planes, warships, strategic missiles) or to the ground forces (e.g., field guns, tanks, land mines). General-purpose equipment may include small arms and their ammunition, or it may refer exclusively to "equipment" (*zhuangbei*) and not armaments of any kind.

It is not at all clear what distinction, if any, is made between "general-purpose equipment" and ground forces equipment in terms of GAD Departmental responsibilities. Moreover, since there are electronics applications in most modern equipment, the Department of Electronics and Information must be involved in many programs, as well.

There are many responsibilities that quite reasonably might have been assigned to any of several organizations—and may still be disputed within the PLA command structure, and within the GAD. Whatever command choices are made to address these

⁶⁸¹ *Jiefangjun bao*, 14 February 1999.

⁶⁸² I am grateful to Ken Allen for drawing my attention to this source.

disputes—as in any large organization—there will always be overlapping responsibilities and turf battles over individual programs and technologies. Staff coordination is vital—but will be complicated by the conflicting backgrounds, *guanxi* networks, and organizational cultures brought to the GAD by its various constituent parts.

Does the Army Equipment Research and Purchasing Department write all the contracts for all GAD-funded research, development, and production; or do some of the other departments write their own? Are all Air Force, Navy, and Second Artillery contracts written autonomously by their Armament Departments?

The Joint Equipment Maintenance Department may supervise some GAD educational and training organizations, and some GAD manufacturing facilities.

Vehicles and Boats Department

The Vehicles and Boats Department (*Chechuan Bu*) reportedly was moved from the General Logistics Department to the GAD in spring 1998. As Susan Puska notes in her chapter, it no longer is a first-level sub-department of the General Logistics Department. Moreover, there was one press report that “boat units of the General Armament Department” assisted relief efforts during the summer 1998 floods. However, transportation is a logistical function. Subsequent news items have been ambiguous, and GAD briefers have not mentioned the *Chechuan Bu* to visitors. It now may be a department of the GAD; it may remain in the GLD in a lower-level status; or it may have been somehow divided up between the GAD and GLD.

Budget Department

The Comprehensive Planning Department is probably responsible for forecasting and developing future budgets. The Budget Department is responsible for developing the details, plus managing and accounting the current budget.

Arms Control and Non-Proliferation Activities

The GAD took over the General Staff Department’s “703 Group,” (*Qilingsan Xiaozu*) which is probably the informal title of the Military Material Import-Export Control Office (*Junpin Chukou Ban’gong Shi*)⁶⁸³ which is in charge of reviewing and vetting exports of conventional weapons and biological/chemical warfare related materials and technologies.⁶⁸⁴ The *PRC Nuclear Export Control Regulations* of September 1997 invested COSTIND with responsibility to review and vet the exports of nuclear weapons-related technologies. That responsibility was transferred to GAD in March 1998.⁶⁸⁵ In July 1998, GAD was given similar responsibility under the *PRC*

⁶⁸³ Harlan W. Jencks, “F-16s to Taiwan: Proliferation Implications,” *Missile Monitor*, no. 3 (Spring 1993), pp. 12-15.

⁶⁸⁴ “PRC Regulations on Monitored and Controlled Chemicals”, 27 December 1995; and “PRC Regulations on Export Control of Military Items”, 22 October 1997.

⁶⁸⁵ Discussions with Ministry of Foreign Trade and Economic Cooperation Delegation at Lawrence Livermore National Laboratory, June 1998.

Regulations for Controlling the Export of Dual-Purpose Nuclear Goods and Relevant Technologies. Export control authority over nuclear materials, formerly vested in the old CNNC, was reassigned to the China Atomic Energy Agency (CAEA) when it became part of SCOSTIND under the 1998 reorganization.

In 1999, General Qian Shaojun reportedly was attempting to get virtually all nuclear export review authority centralized in the GAD—presumably within a considerably expanded 703 Group. He and others within GAD were contesting with SCOSTIND over export review authority. If they succeeded, they would have effectively placed all arms control and non-proliferation export control review and vetting authority in the hands of the GAD.⁶⁸⁶

Distinct from export vetting responsibility is the mission of arms control and non-proliferation (AC/NP) research, training, briefing, policy advice, and representation at international fora. At this writing, it is not clear who, if anyone, within the GAD is in charge of the AC/NP portfolio. Organizationally, arms control and non-proliferation activities are divided among at least two GAD headquarters departments and two different parts of the Chinese Academy of Engineering Physics. In late 2000, there reportedly was a struggle over these arrangements, pitting Qian Shaojun against Hu Side, the recently (1998) retired President of the Chinese Academy of Engineering Physics (CAEP). Both men are nominally retired, though they both retain their places on the S&T Committee, and Hu is still a Professor of CAEP's Institute of Applied Physics and Computational Mathematics (IAPCM).⁶⁸⁷

Hu Side presumably advocates that the Arms Control Research Division of IAPCM, with its long-established program, remain the leading AC/NP agency within the GAD system. Qian probably prefers to concentrate arms control and non-proliferation activities at GAD headquarters—probably within the S&T Committee or CDSTIC.

According to a recent visitor, substantive arms control and non-proliferation research work is definitely not conducted in the GAD Foreign Affairs Bureau. That Bureau does have an Arms Control and Disarmament Desk, but its mandate is largely confined to treaty implementation, not to research or policy advice.⁶⁸⁸

Because it is the repository of information on foreign science and technology, CDSTIC seems the most likely locus of arms control and disarmament activity among GAD's first-level organs. It already has a substantial AC&D role in translation and reporting. Moreover, its Director, Professor Liu Huaqiu, has long been active in arms control and disarmament research, and on the international academic conference circuit; and has acted as advisor to Chinese arms control negotiators. A further indicator is that two internationally known PLA arms control and disarmament experts were both transferred from old COSTIND to the GAD, initially to the Foreign Affairs Bureau. One

⁶⁸⁶ Personal communication, 5 May 1999.

⁶⁸⁷ Discussion, 28 September 2000.

⁶⁸⁸ Discussion, 28 September 2000.

of them, Bai Aili, remains assigned to the Foreign Affairs Bureau AC&D Desk; but the other, MG Zuo Junhua, transferred to CDSTIC.⁶⁸⁹

None of this is to say that GAD sets national arms control and disarmament policy. The GAD provides data and briefings, particularly technical data, but does not “sit at the table” when major policies are decided by the Foreign Ministry, State Council, and the Communist Party Politburo.⁶⁹⁰

In 1999-2000, State budgets included a lot of money for arms control and non-proliferation research; many Chinese organizations have been “getting in on the act.”⁶⁹¹ Seemingly every civilian and military agency with the remotest plausible claim to interest or expertise appears to be setting up an arms control and disarmament operation of some kind. There are few qualified people to fill all the new positions. GAD had lots of funding for arms control and disarmament in 1999-2000—most of which was contracted out to various government agencies and think tanks. This was mostly for technically oriented research on subjects like test-ban monitoring technologies.⁶⁹²

PLA Units under the GAD

Subordinate to the General Armament Department are a range of organizations and activities, some of which are listed in Table 3. Some of these organizations can be identified as GAD-subordinate only because of their military cover unit designators (MUCDs, *junshi danwei daihao*). Prior to the October 2000 revamping of the MUCD system, all units in the MUCD 89xxx series appeared to be former COSTIND organizations, now subordinate to the GAD. Additionally, organizations formerly under the GSD Equipment Department retained their old MUCDs in the 88xxx series. An example of the latter was the Unidentified Armored Equipment Depot, MUCD 88361, which was reported under the GSD in January 1997, and under the GAD in December 1998.⁶⁹³ Some former GSD Equipment Department organizations were listed with new service branch MUCDs, indicating they have been re-subordinated to the service branches.⁶⁹⁴

Exactly how the various research institutes, factories, base units, and schools are subordinated to the GAD is not clear. Normal military practice would place them all in the direct chain of command under GAD headquarters. However, in late 1998, officials of the Chinese Academy of Engineering Physics (CAEP) indicated to at least one visitor that

⁶⁸⁹ Personal communication 5 May 1999 & 19 August 1998; E-mail communication 10 & 11 August 1999; Discussion, 28 September 2000.

⁶⁹⁰ Discussions, 28 September 2000.

⁶⁹¹ Personal communication, March 2000.

⁶⁹² Discussions, 28 September 2000.

⁶⁹³ *Jiefangjun bao*, 17 January 1997; and *Jiefangjun bao*, 2 December 1998

⁶⁹⁴ Ellis Melvin, e-mail 26 March 1999. Melvin believes these units still are under GAD control, despite their service branch MUCDs.

they hoped they would be subordinate to the GAD through the S&T Committee, rather than directly under GAD headquarters. In all probability, this wish was denied, since the whole point of the reorganization was to get all of the former COSTIND research institutes, including the CAEP, directly under military control. Under the former system, military control was mediated by COSTIND's soldier-scientists (who were more scientists than soldiers). Today, the S&T Committee is the last stronghold of the soldier-scientists.

Space Program

Many of the identified GAD units are involved in missile and space activities. Press coverage of the first unmanned launch of the Chinese manned space capsule "Shenzhou" in November 1999 made it quite clear that the GAD is in charge of all of the PLA's missile and space activities. The PLA, in turn, has long been recognized as being in charge of all Chinese missile and space activities, including commercial satellite launch and space exploration. The GAD's comprehensive control of all this explains why, for example, the GAD controls the Telemetry Ship Base (Base 23).

Much R&D for the space program, particularly the basic research, is actually done outside of GAD research institutes, much of it by universities and the aerospace industry. The two "new" astronautics industrial enterprises, China Astronautic Science and Technology Group Company (CASTGC) and China Astronautic Mechanico-Electronic Group Company (CAMEGC), still control a large number of R&D organizations of their own. In addition to contracting with universities and the aerospace industry, GAD conducts some space-related R&D in its own research institutes and may contract some with foreign institutions.

Chinese Academy of Engineering Physics (CAEP)

Headquarters of the Chinese Academy of Engineering Physics (also known as the Ninth Academy) is in "Science City" at Mianyang, Sichuan.⁶⁹⁵ It is the PRC's nuclear weapons R&D organization, functionally equivalent to Arzamas-16 and Chelyabinsk-70 in Russia; and Los Alamos, Livermore, and Sandia National Laboratories in the United States.

Separate from the arms control and non-proliferation activities of GAD headquarters, CAEP has an arms control and non-proliferation research organization of its own in Mianyang. Moreover, the Institute of Applied Physics and Computational Mathematics (IAPCM, 909 Institute) of the CAEP, in Beijing, has an older, larger, and more prestigious Arms Control Research Division of its own.

⁶⁹⁵ The following discussion is based upon John W. Lewis and Xue Litai, *China Builds the Bomb*, Stanford: Stanford University Press, 1988; CAEP brochures; CAEP briefings to US National Laboratory personnel, the author's discussions with CAEP personnel; and personal observations shared by Marco DiCapoa, Bill Dunlop, John Frankenstein, Wen Hsu, Iain Johnston, John Lewis, Xue Litai, and others.

Unrelated to the governmental restructuring announced in March 1998, the CAEP was internally reorganized in 1993-1998; evidently in response to the end of nuclear weapons testing. The only effect of Zhu Rongji's restructuring program seems to have been the transfer, probably in the spring of 1998, of the nuclear weapons manufacturing facility (Special Parts Factory, 903 Factory) to CNNC.

In order to partially support itself, and to facilitate "defense conversion," CAEP and its institutes formed at least a dozen commercial companies in the early 1990s. The CAEP was not subject to Jiang Zemin's July 1998 order for the military to cease entrepreneurial activity, so it continues to engage in commercial pursuits, under the rubric of "One Institute, Two Systems." CAEP enterprises include import-export, consulting, and research operations, as well as some manufacturing. Trading companies include the Ocean Sky (*Haitian*) Corporation, the Ninth Academy (*Jiuyuan*) Company, and the Galaxy (*Yinhe*) Company. CAEP and all its institutes provide services to Chinese military and civilian clients. IAPCM provides computation and computer modeling services, for example.⁶⁹⁶

In June-July 1998, just prior to his retirement as CAEP Director, Professor Hu Side visited Stanford University,⁶⁹⁷ Sandia/Livermore, Sandia/Albuquerque, and Los Alamos National Laboratories. At each venue, he presented an overview briefing on CAEP. Inter alia, he said CAEP should no longer be referred to as the "Ninth Academy," nor should its subordinate institutes be designated by the numbers 901 through 912, nor were any of them to be referred to as "Southwest" Institutes. Moreover, the former twelve institutes had been "consolidated" into the following ten:

- Institute of Fluid Physics
- Institute of Nuclear Physics and Chemistry
- Institute of Chemical Materials
- Institute of Structural Mechanics
- Institute of Electronic Engineering
- Institute of Machinery Technology
- Institute of Applied Electronics
- Institute of Computer Application
- Institute of Laser and Plasma Physics
- Institute of Applied Physics and Computational Mathematics

Hu Side's remarks have been taken to mean that a major restructuring of CAEP's institutes took place in the spring of 1998. Yet, the only certain change, mentioned above, was that the Special Parts Factory (903 Factory) was removed from CAEP and attached to CNNC. Beyond that, it appears that Hu was describing an extended restructuring process that began perhaps four years earlier.

⁶⁹⁶ IAPCM Brochure, n.d. (circa 1991), p. 3.

⁶⁹⁷ Specifically, the Stanford Linear Accelerator (LINAC) and the Center for International Security and Arms Control.

During a dinner at CAEP's "Science City" in September 1995, Hu Side and laser program director Peng Hansheng told a visiting scientist from Lawrence Livermore National Laboratory (LLNL) that there were twelve CAEP institutes; then corrected themselves, saying there were originally twelve, which had consolidated to ten. Then they gave their guests momento picture books that said there were twelve.⁶⁹⁸ Evidently, the consolidation had taken place recently (circa 1995) or was anticipated shortly. Moreover, in briefings at Mianyang in October 1994⁶⁹⁹ and at LLNL in December 1995,⁷⁰⁰ CAEP officials listed exactly the same ten institutes, in exactly the same order, as Hu Side presented at Stanford in June 1998.⁷⁰¹ Neither the CAEP's own viewgraph slides nor the oral presentations mentioned the 900-series numbers in any of those briefings. "Southwest" was not part of any institute name in the December 1995 slides.

It appears that the 900-series designations were formally abolished well over a decade ago. A reasonable guess would be 1982, when the numbered Machine-Building Ministries were all given formal names. In informal conversations and even formal briefings, however, Chinese continue to refer to "Southwest Institutes," and to use the 900-series numbers as a convenient shorthand.

Of special interest on Hu Side's June 1998 list was the Institute of Laser and Plasma Physics. The Shanghai Institute of Optics and Fine Mechanics (SIOFM) was jointly under CAEP and the Chinese Academy of Sciences as of 1995. Housed within SIOFM was the Shanghai Institute of Laser and Plasma Physics, one of the lead organizations for China's Inertial Confinement Fusion (ICF) program.⁷⁰² This appears to be the same as the "Institute of Laser and Plasma Physics" on Hu Side's list.

SIDEBAR:

A MISUNDERSTANDING ABOUT CAEP'S INSTITUTE OF MACHINERY TECHNOLOGY

According to two witnesses, Hu Side said two CAEP organizations had been consolidated: the Research Center of Environmental Engineering and the Institute of Machinery Technology. Their combined organization is now known simply as the Institute of Machinery Technology (IMT). The director of the IMT is Professor Zhou

⁶⁹⁸ Foreign Trip Report, LLNL, 29 September 1995.

⁶⁹⁹ CAEP Briefing for LANL Visitors (viewgraph slide copies), Mianyang, October 1994

⁷⁰⁰ CAEP Briefing by Du Xiangwan (viewgraph slide copies), LLNL, December 1995.

⁷⁰¹ CAEP Briefing by Hu Side (viewgraph slide copies), Stanford LINAC, June 1998.

⁷⁰² CAEP Briefing by Du Xiangwan (viewgraph slide copies), LLNL, December 1995.

Deye. This was puzzling, because Zhou Deye had been director of the [Southwest] Institute of Structural Mechanics (SWISM) since 1995, and still was in 1998.⁷⁰³

The Research Center of Environmental Engineering is well known. It was formed in the early 1990s as part of the effort to attract Chinese and (especially) foreign civilian investment for "military conversion."⁷⁰⁴ It was directly under CAEP headquarters; directed by Zhu Zuliang, who succeeded Hu Side as CAEP Director in November 1998. Although it was a Center (*zhongxin*), not an Institute (*suo*), CAEP hosts used the more prestigious term *suo*, when pointing it out to Sandia National Lab guests in May 1998.⁷⁰⁵

It appears that Hu Side, briefing in English, misspoke himself, saying "Machinery Technology" instead of "Structural Mechanics."⁷⁰⁶ Assuming that Hu simply got the English names mixed up, the explanation is quite simple: The Research Center of Environmental Engineering was absorbed by SWISM. That accounts for Zhou Deye being the Director of the "new" institute. It also explains why both the Institute of Machinery Technology and the Institute of Structural Mechanics appeared on Hu's briefing slides.

End of sidebar

Although they were ordered to reduce staff as early as 1995, CAEP officials said throughout the 1990s that they had about 8,000 personnel, including 4600-4800 scientists and engineers. Since nuclear test explosions ended in 1996 officials also have complained about reduced funding, loss of experienced personnel to retirement, and difficulty in attracting China's best and brightest in competition with business enterprises on the coast.

Lop Nur Test Site (21 Base)

The Lop Nur Nuclear Test Center in Xinjiang employs civilians, but is wholly military at top and bottom: the Test Site is supported by a number of PLA units, including engineer construction, communications, transportation, and logistics troops.

21 Base commanders are technically competent uniformed PLA officers, who often move on to influential senior positions. The test base's first commander, General Zhang Aiping, went on to be COSTIND Director and Defense Minister in the 1980s. Another prominent former commander (in the 1970s) is retired LTG Qian Shaojun, a radio chemist with a nuclear physics degree, who is a member of the China Academy of

⁷⁰³ CAEP Briefing by Du Xiangwan (View graph slide copies), LLNL, December 1995.

⁷⁰⁴ Brochure: *Research Center of Environmental Engineering* (n.d., published circa 1992 or 1993).

⁷⁰⁵ Personal communications, May 1998.

⁷⁰⁶ One interlocutor confirms that Hu spoke English.

Engineering.⁷⁰⁷ He has been mentioned above, as a member of the S&T Committee and as a leading force in arms control and non-proliferation activities—both in old COSTIND and in the General Armament Department.

After its last underground nuclear test explosions in July 1996, Beijing announced a unilateral testing moratorium and then signed the Comprehensive Test Ban Treaty (CTBT) that September. This presumably resulted in “downsizing” at Lop Nur.

Service Arms Organizations

In its first two years of existence, the GAD established Armament Departments (ADs, *zhuangbei bu*, 5944 0271 6752) at all levels of the PLA, down to brigade and regimental Armament Offices.⁷⁰⁸ The Navy, Air Force, Second Artillery, and the People’s Armed Police (PAP)⁷⁰⁹ all organized ADs of their own.

In fact, the three specialized service arms anticipated the creation of the General Armament Department. Long ago, all three established a fourth first-level department concerned with equipment. All three continue to maintain research, development, test, and evaluation organizations of their own. It appears that the majority of R&D funding will be meted out by the GAD to the research institutes of the service arms, as well as to civilian industry, universities, et al.

The PLA Air Force (PLAAF) has had a Headquarters-level Aeronautical Engineering Department since 1976; which changed its name to Equipment-Technical Department (*Zhuangbei Jishu Bu*) in 1992. In 1998, some sub-departments of the PLAAF Headquarters Department and Logistics Department were moved over to the Equipment-Technical Department, to align with the newly created GAD, and the standard PLA terminology “Armament Department” was adopted.⁷¹⁰ Similarly, the Navy has had an Equipment Repair Department for some time.⁷¹¹

Second Artillery units, from the headquarters down to the missile launch brigades, had “Equipment & Technical Departments” (*zhuangbei jishu bu*) as early as the mid-1980s.⁷¹² Those departments were reported in the press to be concerned almost

⁷⁰⁷ US Embassy, Beijing, 130742Z Aug 98 (Unclassified message).

⁷⁰⁸ Directory of PRC Military Personalities, October 1999, SEROLD, pp. iii-iv.

⁷⁰⁹ “All Army Armament Work Conference Held in Beijing,” *Xinhua*, 2 November 1999. On PAP Armament Departments and modernization, see *Kuang chiao ching* (Hong Kong), 16 February 1999, No. 317, pp. 39-41, translated in FBIS FTS19990223001951.

⁷¹⁰ See Ken Allen’s PLAAF Chapter.

⁷¹¹ See Bud Cole’s Chapter on the PLA Navy.

⁷¹² Harlan W. Jencks, “Organization and Administration in the PLA in the Year 2000,” in Richard Yang, ed., *SCPS PLA Yearbook, 1988/89*. Kaohsiung, Taiwan: Sun Yat-sen Center for Policy Studies, National Sun Yat-sen University, 1989, Second Artillery Organization Chart, p. 62.

exclusively with missiles and nuclear warheads. In early 1998, various Second Artillery launch brigades reportedly had “technical departments,” “technical support departments,” “technical battalions,” and/or “engineering offices.” One missile base even had a “science and technology committee.”⁷¹³ By October 1998, however, the standard PLA terminology was adopted: *Liberation Army Daily* reported the 802nd Missile Brigade (MUCD 80402), subordinate to Missile Base 53 (MUCD 80303) had an “Armament Department.” The standardized name was probably reflected, as in the Air force, by some reshuffling of technical support and management organizations within Second Artillery headquarters.⁷¹⁴

Unit Armament Departments

In troop units, the ADs are responsible for receiving, managing, and maintaining equipment throughout its service life. In April 2000, *Liberation Army Daily* reported on an armored division of the Beijing Military Region which had established a new mechanism of support that “caters to the characteristics of their new equipment and meets the requirements for imparting new fighting capabilities to the new equipment.” Moreover, the GAD was “disseminating the practice across the whole army.” The division’s new system of equipment handling featured “just-in-time supply of materials.” It used computers and “other new technologies, an equipment repair system with modern inspection, testing, and on-demand maintenance.” The materials supply management system achieved “breakthroughs through information technology-based means and new packaging technology.” Technical training used “multimedia platforms and ... ‘integration of peacetime and wartime operations.’” The division AD also devised some sort of electronic monitoring system for computer diagnosis of some of their armored vehicles’ engines. Having expended every imaginable high-tech buzz-word, the *Liberation Army Daily* reporter concluded with the revealing statement that, “The new technical support mechanism has superseded the conventional methods of maintenance based on experience, whereby engineers listen with their ears, look with their eyes, and feel with their hands.”⁷¹⁵

Much of this, particularly the material supply and monitoring systems, appears to overlap the supply functions of unit Logistics Departments. In fact, since the announcement in 1999 that the PLA was adopting a comprehensive “joint service system” for logistics, the GLD and the GAD seem to be competing for resources, responsibility, and authority (See the following section).

⁷¹³ Ellis Melvin, e-mail, 9 April 1998

⁷¹⁴ For example, see “Strategic Missile Unit Forms New Higher Type Technical Support System,” *Jiefangjun bao*, 28 April 2000, p. 1.

⁷¹⁵ “A Certain Armored Division Develops New Mechanism of Technical Support,” *Jiefangjun bao*, 5 April 2000, p. 2.

“Mass Innovation”

The above press report about the innovative armored division, and other stories like it, indicate that—for all their talk about centralization and high-tech—PLA equipment managers at all levels are still engaging in something very like Maoist-style “innovation.” Moreover, they are being encouraged in this by the highest levels of the PLA command. For example, in March 2000, Defense Minister Chi Haotian commended Xu Guangfeng, the director of a unit AD in the Nanjing Military Region, who had developed “a self-protection device for new equipment of a certain model.” General Chi not only commended Xu, but encouraged him to continue in his studies and innovations. Xu had compiled a technical procedures manual of over 600,000 characters for this particular new piece of equipment. His maintenance procedures “had filled in many gaps in the self-management and self-maintenance of the troops using the new equipment of the said model.” Adaptation of these procedures by the rest of the PLA is *officially encouraged*.⁷¹⁶ Similarly, in October 1999, General Cao visited a demonstration of weaponry innovations in the Jinan Military Region, and called on the whole army to emulate the “typical experiences” of ADs in the grassroots units.⁷¹⁷

This is all reminiscent of unit-level “innovation” during the Maoist period—which produced “technical innovations” that were often unworkable and primitive—and sometimes downright dangerous—in the name of “learning from the masses.”

These incidents unwittingly expose a fundamental shortcoming in Chinese military equipment development: How was it that neither the GAD nor the industrial enterprise that developed Xu Guangfeng’s unidentified new equipment hadn’t developed the maintenance procedures simultaneously with developing the equipment? Why did it fell to an AD director in a using unit to write up the procedures?

Moreover, in this and other instances, unit-level innovations are being “commended” to the rest of the army, which is “encouraged” to “emulate” them. In January 1999, Jiang Zemin told the First Enlarged Party Committee Meeting of the GAD that the decision to establish the GAD was, *inter alia*, to “enhance centralized leadership over weaponry and equipment development.” Evidently, standardization and “centralized leadership” continue to elude the PLA in the equipment sector.

DECISION MAKING AND RELATIVE POWER

“Degenerate” Practices

The GAD is supposed to get competitive market-priced contracts for military equipment, but GAD contract officials still find themselves dealing with monopoly suppliers. That being the case, an official at some level above GAD and the industrial supplier must administratively adjudicate the price, which is still likely to include

⁷¹⁶ “Chi Haotian Encourages Xu Guangfeng, Director of Armament Department of Certain Unit...,” *Jiefangjun bao*, 27 March 2000.

⁷¹⁷ *Wen Wei Po*, 17 November 1999, p. A3.

substantial subsidies. That is, industry will still be selling below real cost, even though the PLA will be paying more than it would in a free market.

Alternatively, the GAD purchasing officer and the industrial seller can make a deal that profits them both—personally. The situation is ripe with opportunities for collusion, kick-backs, and bribery, which is already rumored. GAD procurement officers and factory “military representatives” are ideally positioned for lucrative abuses of authority. Because they are dealing with monopoly suppliers in something of a legal and regulatory vacuum, “irregularities” are all but certain. This helps explain the considerable emphasis Cao Gangchuan and GAD Political Commissar Li Jinai have both accorded to promulgating better rules and regulations. General Cao was referring to this problem at a political work meeting for GAD academies and schools in May 2000, when he said, “Ideological and political building should be based on ‘the ability to win’ and ‘the ability not to become degenerate’.”⁷¹⁸

Conflict with SCOSTIND

As indicated above, in the section on “Organizational History, and Emerging Roles and Missions,” the GAD was created principally at the expense of the former COSTIND, which was reincarnated as State COSTIND (“SCOSTIND”) with drastically reduced roles, missions, resources, and prestige. In addition to continued wrangling over control of various projects (and their funding), SCOSTIND and the GAD have been competing for control of entire categories of military technologies and products during the formulation of the Tenth Five Year Plan, which will cover the years 2001-2005.

Even if military R&D and acquisition budgets increase substantially during the 10 FYP, the GAD-SCOSTIND conflict is a fairly zero-sum game. That is because (as indicated above in the sub-section on “Contracting and Market Competition”) the increased official budgets will largely reflect more transparency, rather than more actual expenditure.

Conflict with the GLD

In the summer of 1999, “PLA Joint Logistics Regulations” were promulgated by the Central Military Commission. The PLA has been attempting to unify its logistical system for at least the past decade, against considerable resistance from the service arms and military regions. (The new joint logistics service system is discussed in greater detail in Susan Puska’s chapter on the General Logistics Department). Official commentary has made the point that creation of the joint logistics services system went hand-in-hand with the creation of the General Armament Department system.⁷¹⁹ In the fall of 1998, the seven Military Regions established Armament Departments (ADs), and re-designated their Logistics Departments as “Joint Logistics Service Departments.” The Logistics

⁷¹⁸ “At Political Work Meeting of the General Armament Department’s Academies, Cao Gangchuan Stresses...,” *Jiefangjun bao*, 26 May 2000, p. 1.

⁷¹⁹ *Liaowang* 25 May 1998, p. 30. Arthur Ding called this source to my attention.

Services Departments are supposed to manage, plan, build, and implement logistical support for all the arms and services, to include warehouses, hospitals, supply stations, and other logistics services—but not weapons, and not *some* equipment.⁷²⁰

However, it is not clear which equipment is to be exclusively managed by the GAD, and what remains in the hands of the GLD. Moreover, maintenance, which has always been a logistics service, is now a GAD function, at least for weapons and major end-items. But there is a vast array of equipment for the two departments to argue over, with the dividing line lying somewhere between tanks (GAD) and tents (GLD). In the absence of clear regulations, the situation is provoking conflict throughout the entire PLA. Every such conflict will require GLD and GAD officers at the relevant command level to work out a *modus vivendi*, probably adjudicated by their unit commander.

CONCLUSION

The PLA General Armament Department is still a work in progress. It has not yet established its boundaries vis-à-vis SCOSTIND with respect to R&D. Nor has it yet established its boundaries vis-à-vis the GLD with respect to “joint service support.” Nor has it yet settled important internal divisions of responsibility (e.g., arms control and disarmament activities). Some of the badly-needed regulations have been written; a few promulgated; none openly published.

Much will depend upon personalities. General Cao Gangchuan appears to be a critical actor, who reportedly has strong political backing. Even observers who are not particularly impressed with Cao’s abilities as a leader or organizer have noted that he has the ear and patronage of General Secretary Jiang Zemin. Cao repeatedly has been noted in Jiang’s company during inspection trips and meetings with foreign military officials.

Cao has been promoted three times since Jiang consolidated his power at the 14th Party Congress in 1992. That same year, at the age of 57, Cao was promoted from being Director of the Arms Trade Office of the CMC to PLA Deputy Chief of Staff in charge of equipment acquisitions. He was promoted again to be Director of old COSTIND in late 1996, and joined the Central Committee in 1998. In April 1998 he became Director of the GAD and was promoted to three-star rank. On 4 November 1998, he was named a member of the CMC.⁷²¹

The Hong Kong press seems to be convinced that General Cao is destined to end up as Chief of the General Staff. Willy Wo-Lap Lam predicted in October 1999 that, at the 16th Party Congress in 2002, Cao will be promoted to vice-chairman of the CMC and to the Politburo.⁷²²

Precisely because its future is so uncertain, the personal connections and bureaucratic clout of its leading personality are important to the GAD’s fate. The entire

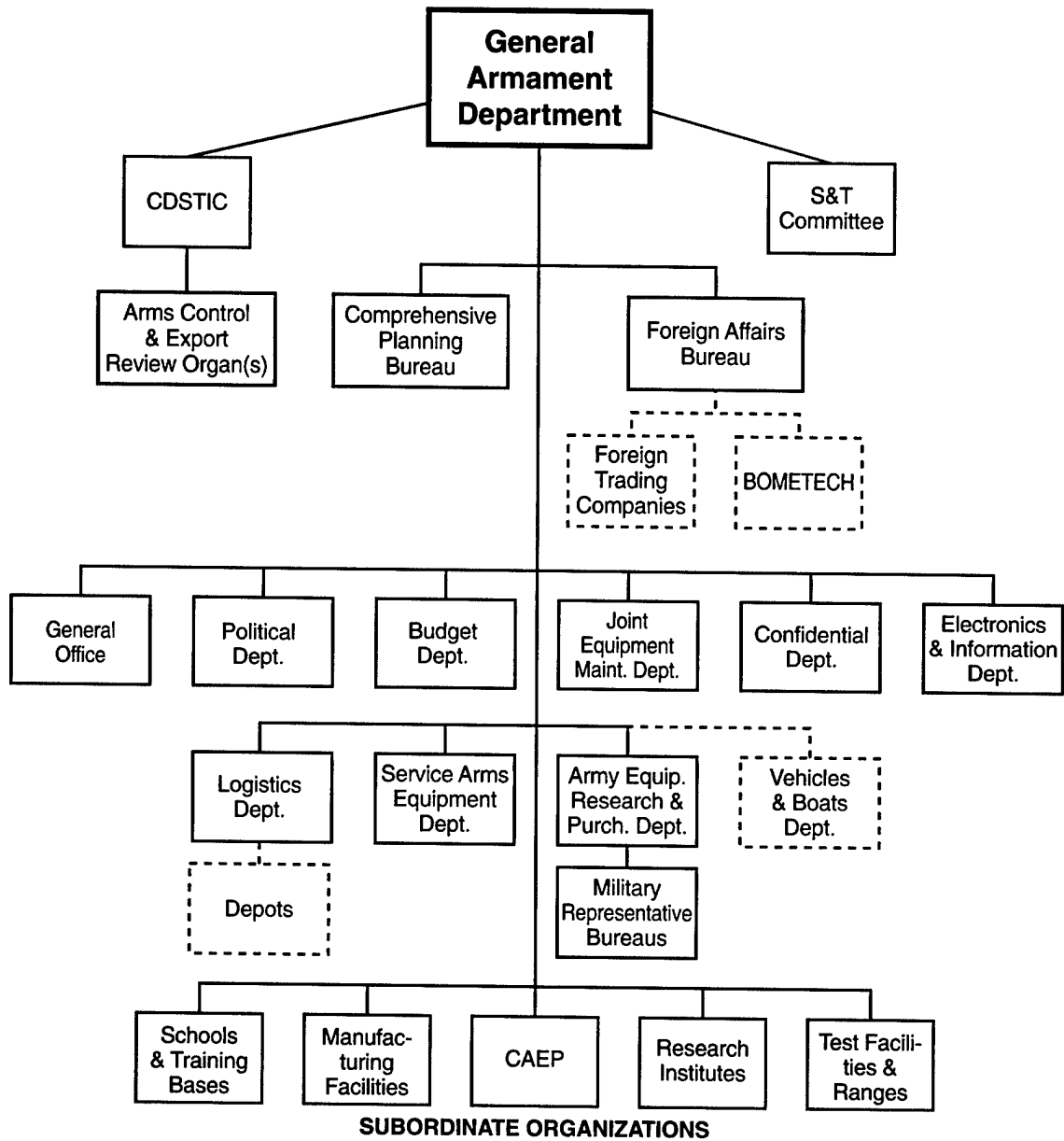
⁷²⁰ *Jane's Defence Weekly*, 1 December 1999, p. 14; and Hong Kong *Wen Wei Po*, 5 August 1999, p. D1.

⁷²¹ *Hsin Pao* [Hong Kong Economic Journal], 1 March 2000, p. 21.

⁷²² *South China Morning Post*, 5 March 2000, p. 6; *South China Morning Post*, 21 October 1999, p. 12.

organizational history of COSTIND and its predecessor, the Party's National Defense Science and Technology Commission (NDSTC), was largely determined by the procedures, mandates, and organizational culture established by Marshal Nie Rongzhen when he first set up the NDSTC in the 1950s. Marshal Nie, his protégés, and his family dominated the NDSTC and COSTIND from then until his son-in-law, MG Ding Henggao, was replaced by MG Cao Gangchuan in December 1996. It is reasonable to expect that, just as COSTIND was the house that Nie Rongzhen built, the GAD will be the house that Cao Gangchuan builds.

Figure 7.1. Organization of the General Armament Department



**Table 7.1 Identified Organizations and Responsibilities Taken Over
by the General Armament Department**

From the General Logistics Department (GLD):

Armament Department (*Junxie Bu*)

Motor Vehicle & Boat Maintenance (*Chechuan Bu*) [possible but not confirmed]

From the General Staff Department (GSD):

Equipment Department (*Zhuangbei bu*)

Military Services Department (*Bingzhong Bu*) [most functions and personnel.
Some probably remained in GSD]

Bureau of Military Equipment and Technology Cooperation (BOMETEC)

“703 Group” (Arms Control Leading Group)

From (old) COSTIND:

Former COSTIND Office Building

All military personnel

All test sites and ranges

China Defense Science and Technology Information Center (CDSTIC)

Science and Technology Committee

Export vetting responsibilities

“Purely military” R&D responsibilities

Chinese Academy of Engineering Physics (CAEP)

Some research institutes

Some production facilities

COSTIND Command Technical Academy

Table 7.2 Identified Military Representatives Bureaus and Offices ⁷²³

GAD Beijing Military Representatives Bureau
Military Rep. Office, 207 Research Inst. (develops Anti-tank missiles)
GAD Changsha Military Representatives Bureau ⁷²⁴
GAD Shanghai Military Representatives Bureau
GAD Shenyang Military Representatives Bureau
GAD Wuhan Military Representatives Bureau ⁷²⁵
GAD Engineer Corps Wuhan Area Military Representatives Office
Military Representatives Office, 5124 Factory ⁷²⁶
GAD Engineer Corps Wuxi Area Military Representatives Office ⁷²⁷
Military Inspection Team, 9352 Factory
GAD Engineer Corps Fuzhou Area Military Representatives Office
GAD Armor Baotou Area Military Representatives Office ⁷²⁸

⁷²³ Bureau (*ju*, STC 1444); Office (*chu*, STC 5710).

⁷²⁴ *Jiefangjun bao*, 25 January 1999.

⁷²⁵ *Jiefangjun bao*, 24 December 1998.

⁷²⁶ *Jiefangjun bao*, 4 January 1999.

⁷²⁷ *Jiefangjun bao*, 4 January 1999.

⁷²⁸ *Jiefangjun bao*, 25 January 1999.

**Table 7.3 Some of the Organizations under the General Armament
Department⁷²⁹**

National Defense Science and Technology University (Changsha, Hunan)	
General Armament Department Command and Technical Academy (Beijing) ⁷³⁰	
PLA Information Engineering University (probable)	
PLA Science and Engineering University (probable)	
Chinese Academy of Engineering Physics (9th Academy)	MUCD 89950
Northwest Institute of Nuclear Technology ⁷³¹	
U/I Armored Equipment Depot ⁷³²	MUCD 88361
Jiuchuan Satellite Launch Center (Base 20)	MUCD 89710
Lop Nur Nuclear Test Base (Base 21) Malan, Xinjiang	MUCD 89800
Telemetry/Survey Ship Base (Base 23) Wuxi, Jiangsu ⁷³³	MUCD 89960
Taiyuan Satellite Launch Center (Base 25)	
Xi'an Satellite Monitor and Control Base (Base 26)	MUCD 89710
Kashi Tracking Station	MUCD 89760
Nanning Satellite Monitoring Station ⁷³⁴	MUCD 89761
Xichang Satellite Launch Center (Base 27)	MUCD 89710
Aerodynamics Research & Development Center (29 Base) Mianyang ⁷³⁵	MUCD 89952
Baicheng Conventional Weapons Test Center (31 Base)	MUCD 89870
UI GAD Base Technical Service Station	MUCD 89878
U/I Testing and Training Base, Luoyang, Henan ⁷³⁶	MUCD 89820
U/I Base, Nei Monggol	
Huayin Conventional Weapons Test Center	
GAD U/I Research Institute (possibly 56 Institute) Wuxi, Jiangsu ⁷³⁷	MUCD 89001
GAD Engineering First Research Institute (Wuxi, Jiangsu)	MUCD 89604
Engineer Corps Technical Equipment Research Institute ⁷³⁸	

⁷²⁹ Unless noted, all data is from 1998 and 1999 issues of *Directory of People's Republic of China Military Personalities*, SEROLD HAWAII, Inc; *China Directory 2000*, Tokyo: Radiopress, Inc., October 1999; and personal communications with Ellis Melvin.

⁷³⁰ *Jiefangjun bao*, 17 June 1998.

⁷³¹ Informant A.

⁷³² *Jiefangjun bao*, 2 December 1998.

⁷³³ *Jiefangjun bao*, 19 May 1999.

⁷³⁴ *Jiefangjun bao*, January 1999.

⁷³⁵ *Sichuan Daily*, 25 August, 1998.

⁷³⁶ *Jiefangjun bao*, 25 June 1998.

⁷³⁷ *Wuxi Daily*, April 1999.

GAD Anti-Chemical Warfare Research Institute⁷³⁹

Nanjing Engineering Research Institute

Hospitals 513, 514, 515, and 520⁷⁴⁰

GAD Wuhan Ammunition Inspection and Refurbishing Shop

⁷³⁸ *Jiefangjun bao*, 22 November 1998.

⁷³⁹ *Jiefangjun bao*, 26 December 1998.

⁷⁴⁰ The 520 Hospital serves the Aerodynamics Research & Development Center (29 Base) in Mianyang, Sichuan. See *Sichuan Daily*, 14 May 1999; and *Sichuan Daily*, 25 August 1999.

8. PLA GROUND FORCES: MOVING TOWARD A SMALLER, MORE RAPIDLY DEPLOYABLE, MODERN COMBINED ARMS FORCE

By Dennis J. Blasko^{741 742}

Now more than ever, any attempt to define precisely the size, organization, and structure of the People's Liberation Army (PLA) ground forces is bound to be fraught with inaccuracies and end in frustration. The entire PLA has undergone a 500,000-man reduction and presently totals about 2.5 million, down from approximately three million in 1996. According to the Chinese Defense White Paper of 1998, the ground forces have absorbed the bulk of those reductions, amounting to about 19% of its pre-reduction numbers.⁷⁴³ This calculates out to a reduction of about 418,000 personnel, based on a 1996 figure of about 2,200,000 for the ground forces.⁷⁴⁴ At the same time, the ground forces have undergone the most significant reorganization and restructuring in over a decade. The paucity of sources for current, detailed, and accurate information has made monitoring the PLA ground forces during the simultaneous reduction and reorganization over the past three years even more difficult than usual.

The Chinese government has provided only minimal of information on the subject, primarily in its Defense White Papers. The US government, particularly the Department of Defense in a series of congressionally mandated reports since 1997, has provided the public slightly more detailed information, but no comprehensive

⁷⁴¹ The author wishes to thank Ellis Melvin for his unique support in this project.

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⁷⁴³ Information Office of the State Council, the People's Republic of China, *White Paper—China's National Defense*, 27 July 1998. A second Defense White Paper was published in October 2000 and deserves careful reading though it is limited in specific detail.

⁷⁴⁴ International Institute for Strategic Studies, *The Military Balance, 1996/97*, London: Oxford University Press, 1996, p. 179.

examination of the PLA ground forces since 1984.⁷⁴⁵ Because of the need to protect intelligence sources and methods, these recent unclassified reports contain some useful information and analytical conclusions, but omit much information and analysis that could be very helpful to the American public's understanding of Chinese military modernization.

The International Institute for Strategic Studies' annual *The Military Balance* provides generally reliable gross numbers of units and equipment, but may have some important specific inaccuracies and over-counting. The Jane's group of publications is essential for the many details it publishes though they often are reported in a piecemeal manner as new developments are uncovered. Jane's also includes a few very useful analytical articles each year. A number of websites have varying levels of up-to-date and accurate information, but must be used with caution due to their sometimes dubious pedigrees. And finally, a very important source of information to China analysts for well over a decade has been the series of *Directory of PRC Military Personalities*, prepared originally under the supervision of the former US Defense Liaison Office in Hong Kong, and recently by SEROLD Hawaii, Inc. The information found in the *Directory of PRC Military Personalities* is the result of long-time, careful reading of mainland newspapers. Though the *Directory* is used most often to identify PLA personnel, it also contains a wealth of order-of-battle information, though, especially during the reduction and reorganization, it may contain some omissions and double counting of units.

The 50th Anniversary Parade of the PRC held on October 1, 1999, and the accompanying Chinese media coverage, resulted in the best public look at, and description of, much of the PLA's Chinese-made equipment inventory since the last major military parade in 1984. The author has used a combination of all these sources along with personal experience of visiting and observing PLA units and talking with PLA personnel since 1992 as the basis for this essay. What follows will necessarily be only a partial picture of the state of the PLA ground force organization in the year 2000; more changes are certain to follow as additional units continue to reorganize and more information on this aspect of PLA modernization is revealed.

GENERAL STRUCTURE

Traditionally, the PLA ground forces have been organized into a three-tiered structure:

- Main force units, though stationed in specific locales, may be deployed anywhere throughout the country as required;

⁷⁴⁵ In November 1984, the Defense Intelligence Agency released its *Handbook of the Chinese People's Liberation Army*, which included fairly detailed organization charts. No similar extensive study has been made available to the public in over 15 years. Meanwhile, the PLA has undergone at least two major organizational reforms. The 1984 DIA *Handbook* is now useful primarily for historical reference purposes.

- Local or regional forces are primarily responsible for defense of the areas where they are stationed and consist of active and reserve PLA units, as well as People's Armed Police (PAP) units,⁷⁴⁶ which would perform as light infantry; and
- Militia units that would provide combat and logistics support to main and local force units in local defense.

This structure remains functional today. Two of the most important developments since approximately 1984 are the creation of a system of reserve units and the transfer of PLA units into the PAP, which has a secondary mission of local defense against external enemies. Though theoretically important in the defense of the mainland from foreign invasion, the size and role of the militia have diminished over the past 15 years as the PLA's operational orientation and doctrine have shifted to China's periphery.

PLA forces are also categorized according to their readiness and manning levels. Class A or Category One (*jia lei* or *jia xing*) units are at or near full manpower (above 80% of personnel) and capable of deploying without significant augmentation and training.⁷⁴⁷ Class B or Category Two (*yi lei*) units are maintained at 60-80% manning level, may not have certain units in their Table of Organization and Equipment (TO&E) or may have smaller units organic than a comparable Class A unit, and may require additional training and more time to deploy than Class A units. Previously, there were also Class C or Category Three (*bing lei*) units, which were at even lower manpower and readiness levels than Class B units. It is uncertain if any Class C units remain in the active PLA. Entire Group Armies may be categorized as Class A or B; divisions or brigades appear certain to have such classifications. There has been speculation as to exactly which units are categorized as Class A or B, but there is little Chinese-origin data to confirm these estimates.

COMMAND AND CONTROL

Command and control for PLA ground forces originates with the Central Military Commission (CMC), passes through the General Staff Department (GSD), and is exercised through a series of regional and operational headquarters.

Military Regions (*da junqu*)

China is currently divided into seven Military Regions (MR). MRs are administrative headquarters, responsible for the army, air, and naval forces located in

⁷⁴⁶ According to the 1997 PRC Law on National Defense, "Under the leadership and command of the State Council and the Central Military Commission, the Chinese People's Armed Police force is charged by the state with the mission of safeguarding security and maintaining public order."

⁷⁴⁷ Conversation with PLA officer, May 2000.

several provinces.⁷⁴⁸ Each MR is intended to be commanded by a Lieutenant General, though some are commanded by full Generals.⁷⁴⁹ MR commanders (*siling yuan*) are assisted by several deputy commanders (*fu siling yuan*), including the regional air force commander and naval commander, if naval forces are present within the MR; a political commissar (*zhengzhi weiyuan* or *zhengwei*); and a number of deputy political commissars (*fu zhengwei*).⁷⁵⁰ MR staffs parallel, but are smaller than, the organization of the four General Departments and are overseen by an MR Chief of Staff (*canmou zhang*). Each MR has a headquarters, political department, joint logistics department, and equipment department.⁷⁵¹ The presence of a "joint logistics department" (*lian qin bu*) indicates that this element is intended to provide support to army, naval, and air forces assigned to the region.

MR ground forces consist of Group Armies; independent units that are directly subordinate to MR, Military District, or Garrison headquarters; and local forces and reserve forces under the command of the Military Districts assigned to the MR. The number and types of units under direct control of MR headquarters vary according to the geography and needs (i.e., mission) of each region. Units subordinate to MR headquarters may be divisions, brigades, groups, or regiments of the various ground service arms or branches: infantry, armor, artillery, air defense, army aviation (helicopter), special operations, reconnaissance, engineer, communications, electronic warfare, and logistics support such as motor transport and maintenance.

Under normal conditions, the order to move any but the smallest military units for operational purposes must originate in the GSD at the direction of the CMC.⁷⁵² In time of emergency, it is likely that a temporary operational headquarters (*zhanqu*) would be formed to conduct military operations. This ad hoc wartime headquarters would be formed around the structure of an MR headquarters, but could be augmented, and perhaps commanded, by officers from higher headquarters.

⁷⁴⁸ Responsibilities for the MR, MD, MSD, and PAFD headquarters described in this section are derived from "Zhongguo wuzhuang liliang," [China's Armed Forces] in *Xiandai Bingqi* [Modern Weapons], March 1994, p. 5.

⁷⁴⁹ Throughout the PLA, all duty positions have a target rank, though in practice the actual incumbent may have a rank one level higher or lower.

⁷⁵⁰ Chinese terminology for duty positions used throughout are derived from *Xiandai Jundui Zhihui* [Command of Modern Armies], Beijing: National Defense University Press, 1993, Appendix 5, pp. 518-522; and *A New English-Chinese Chinese-English Dictionary of Military Terms*, Beijing: Defense Industries Press, 1999.

⁷⁵¹ *Shijie junshi nianjian* [World Military Yearbook], Beijing: PLA Press, 1999, pp. 102.

⁷⁵² Michael Swaine, *The Military & Political Succession in China*, Santa Monica, CA: RAND, 1992, pp. 122-4.

In the 1950s 13 Military Regions were created. Two MRs were eliminated in the late 1960s, and the remaining 11 MRs were reduced to the current seven during the reduction and reorganization that began in 1985 and was completed by 1988.

MR's are named after the city in which their headquarters is located. The seven MRs that exist in 2000 are:

- Beijing MR, consisting of the Beijing and Tianjin Garrisons and the Hebei, Shanxi, and Neimenggu Military Districts
- Chengdu MR, consisting of the Chongqing Garrison and the Sichuan, Xizang (Tibet), Guizhou, and Yunnan Military Districts
- Guangzhou MR, consisting of the Hong Kong and Macao Garrisons and the Hunan, Guangdong, Guangxi, Hainan, and Hubei Military Districts
- Jinan MR, consisting of the Shandong and Henan Military Districts
- Lanzhou MR, consisting of the Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang Military Districts
- Nanjing MR, consisting of the Shanghai Garrison and the Jiangsu, Zhejiang, Anhui, Fujian, and Jiangxi Military Districts
- Shenyang MR, consisting of the Liaoning, Jilin, and Heilongjiang Military Districts

Military Districts (*sheng junqu*)

The local forces in each province and autonomous region are commanded by a Military District (MD) headquarters. MDs are named for their provinces or autonomous regions; MD commanders (*siling yuan*) are generally Major Generals.

MD commanders are responsible for the local and reserve forces in their province and for mobilization preparations. MD commanders coordinate closely with local government leaders and PAP forces in their area.

Military Subdistricts (*junfenqu*)

Each MD is divided into numerous Military Subdistricts (MSD). MSD areas of responsibility overlay the boundaries of prefectures or cities, which are the size of prefectures (subordinate counties). MSDs generally take the name of their prefecture or city. Like MR and MD commanders, MSD commanders are also known as *siling yuan*.

MSD headquarters are responsible for formulating mobilization plans, organizing conscription, guaranteeing reserve and militia training, and supervising the activities of People's Armed Forces Departments in its area.

People's Armed Forces Departments (*renmin wuzhuang bu* or *renwubu*)⁷⁵³

People's Armed Forces Departments (PAFD) are found at county, city, district, and sometimes work unit level, such as large factory. PAFD are primarily responsible for meeting local conscription quotas, as determined by their higher MSD and MD headquarters. In addition to providing manpower to the military, they also assist in obtaining local material resources for the units in their area and are involved with supporting demobilized soldiers and organizing reserve and militia training. Of necessity, they work very closely with local government and Communist Party officials. As can be seen from the responsibilities of the PAFD, their activities are prone to corruption and abuse.

For 11 years prior to 1996, PAFD were run by local government and wore different uniforms than the PLA. In 1996, PAFD officers returned to the control of the PLA and their officers once again wore PLA uniforms.⁷⁵⁴ This action was likely an attempt to combat corruption in these organizations.

Garrison Headquarters (*weishu qu* or *jingbei qu*)

According to the Chinese Defense White Paper, garrison units in large and medium-sized cities are responsible to "check, inspect and handle cases of infringements of military discipline by military personnel as well as cases of violations of relevant rules by military vehicles." In effect, the primary duty of garrison units is to guard military facilities and maintain order among the troops when they are outside of their military barracks. Soldiers performing garrison duty are often seen patrolling the streets on foot or in vehicles or setting up "military vehicle checkpoints." These soldiers have authority only over members of the PLA and are not involved in the law enforcement activities of the local public security apparatus. In the US Army, these duties are performed by Military Police units and "courtesy patrols" organized by local units.⁷⁵⁵

⁷⁵³ Because of their name "*renmin wuzhuang bu*," PAFD sometimes have been confused with the PAP whose name in Chinese is "*renmin wuzhuang jingcha*" or often shortened to "*wujing*."

⁷⁵⁴ Ting Yi, "People's Armed Forces Establishment Reportedly Returned to People's Liberation Army," in *Ming bao*, 20 March 1996, in Foreign Broadcast Information Service (FBIS) serial HK2703080796, 27 March 1996; Beijing *Xinhua Domestic Service*, "PRC: Beijing Beefs Up People's Armed Forces Departments," in FBIS-CHI-96-212, serial OW3110074296, 1 November 1996.

⁷⁵⁵ Some Chinese, including military officers, refer to the PAP as "military police." Use of this term can cause confusion because the PAP are *not* part of the PLA, though the PAP is one of the three components of the Chinese *armed forces* (with the active and reserve units of the PLA and the militia as the other two components). PLA units that perform garrison duties are more like "military police" in the US sense of the term than the PAP are. The PAP and militia are properly termed paramilitary organizations.

Garrison responsibilities are frequently assigned to operational PLA units or other headquarters units stationed in the area as an additional duty of the local commander.

The separately administered cities of Beijing, Tianjin, Shanghai, and Chongqing, as well as the Special Administrative Regions of Hong Kong and Macao, all have garrison headquarters which have defensive responsibilities beyond those of the military police-type responsibilities of other garrison units and have combat units assigned to their headquarters to provide protection from foreign attack. In border areas, garrison commands also control combat units, such as infantry or artillery divisions or brigades. Many of these units are relatively static and artillery-heavy, intended for local defense.⁷⁵⁶ Similar to other garrison units, they are not involved in the daily enforcement of domestic order; however, under emergency conditions, like other PLA forces they could be ordered to assist the local civilian authorities to maintain internal stability. It is unclear how many combat divisions, brigades or regiments are assigned to garrison headquarters throughout China. These combat units under garrison commands may be categorized as "independent" units in some order-of-battle counts.

OPERATIONAL GROUND FORCE UNITS

Most ground force combat units (infantry, armor, artillery, and air defense) are assigned to Group Armies. Group Armies also have combat service and service support units (engineer, communications, chemical defense, transportation, supply and maintenance, etc.) assigned to them. Some combat units may not be assigned to Group Armies and are considered "independent," being assigned directly to Military Region, Military District, or Garrison headquarters. As mentioned above, MRs also may have an assortment of combat units and combat service and service support units, such as communications, engineer, bridging, and electronic warfare units. The seven helicopter units known to exist in the PLA ground forces appear to be assigned to both MR and Group Army headquarters depending on local situations. Since the early 1990s, relatively small Special Operations units have been formed in each of the MRs, and are subordinate to MR headquarters. According to Xinhua, the PLA's first Psychological Warfare Unit was recently formed and is probably assigned to the Shenyang MR.⁷⁵⁷

Group Army (*jituan jun*)

The Group Army (GA) system is the direct lineal descendant of the numbered army corps of the post-Korean War and People's Liberation Army periods from 1955 to 1985; the Field Army system of the early People's Liberation Army period from 1946 to 1954;

⁷⁵⁶ Gregory K. S. Man, "Modernizing the Chinese Military," in *China: A Nation in Transition*, Washington, DC: Congressional Quarterly, 1995, p. 276.

⁷⁵⁷, "Tidbits About China's First Psychological Warfare Unit," *Xinhua Hong Kong Service*, FBIS-CHI-2000-0430, 30 April 2000.

the front armies, armies, and corps of the Eighth Route Army period from 1937 to 1945; and the corps and armies of the Red Army period from 1927 to 1930.⁷⁵⁸

Group Armies are commanded by a Major General. In contrast to the appellation *siling* for MR and MD commanders, Group Army commanders are referred to as *junzhang*. This is said to be a sign of respect for the difficult task of direct command of troops.⁷⁵⁹

By 1988, the former 35 infantry corps were reduced to 24 Group Armies. The structure of Group Armies varied greatly, but basically they were corps-sized combined arms units, consisting roughly of:⁷⁶⁰

- Three infantry divisions
- A tank division or brigade
- An artillery division or brigade⁷⁶¹
- An antiaircraft artillery (AAA) division or brigade⁷⁶²
- A communications regiment
- An engineer regiment
- A reconnaissance battalion
- Possibly a pontoon bridge regiment and/or an anti-chemical regiment
- Other combat service support units, such as transportation and medical units
- In a few cases, a helicopter unit (called a group)⁷⁶³

⁷⁵⁸ See Appendix D of Swaine, *The Military & Political Succession in China*, p. 243, for a chart of the "Evolution of the Field Army System, 1927-1992," which defines these periods and identifies the heritage of the Group Armies.

⁷⁵⁹ A PLA officer has told the author that reaching the level of GA or MD commander is very important to Chinese officers. After they attain that level, officers may retire with the benefits of salary, housing, automobile and driver, office space, etc. Below that level, officers are demobilized and do not receive similar benefits.

⁷⁶⁰ The structure for Group Armies is based on extrapolations from the series of *Directory of PRC Military Personalities*.

⁷⁶¹ Artillery divisions or brigades are likely to have anti-tank artillery or missile units assigned. One specific anti-tank missile brigade has been identified belonging to the 16 GA in the Shenyang MR.

⁷⁶² A very few ground force AAA units have received short-range, mobile surface-to-air missiles (SAM) to become mixed air defense units. The PLA Air Force (PLAAF) has the majority of SAM units found in the PLA, as well as large numbers of larger caliber AAA guns.

⁷⁶³ Some articles have said Group Armies have "airborne" units. Reconnaissance battalions and companies in the ground forces, as well as the newly formed Special Operations Forces, are likely to be trained in parachute insertion. However, the primary "airborne" unit in the PLA is the PLA Air Force's 15th Airborne

Depending on their location, mission, and readiness category, some GAs could have had one or two additional (or fewer) divisions, no tank units, more or less artillery or AAA units, etc. Gross manpower totals for a Group Army have ranged from about 45,000 to 60,000 personnel.

The 24 Group Armies were assigned among the seven MRs. Until the late 1990s, Beijing MR had six GAs, Chengdu MR had two, Guangzhou MR had two, Jinan MR had four, Lanzhou MR had two, Nanjing MR had three, and Shenyang MR had five. The majority of the Group Armies were deployed in garrison locations along major avenues of approach into China from the former USSR and Mongolia. Nearly half of the GAs were located to protect Beijing and Manchuria from a Soviet attack. The two Group Armies in the Lanzhou MR were positioned to fight Soviet forces after they had traveled great distances fighting local forces and militia through the barren northwest. Jinan MR was considered the strategic reserve, with its four GAs capable in theory of moving to reinforce units in the north, west, or south. Only three GAs were located along the coast opposite Taiwan (two in Nanjing MR and one in Guangzhou MR). During the 500,000 man reduction from 1996 to 2000, three GA headquarters were eliminated, one each in the Beijing, Jinan, and Shenyang MRs.

Currently, the structure of Group Armies is changing. Many, if not all, have lost one or more infantry divisions through deactivation, resubordination, or downsizing. Others may gain units or equipment from deactivated headquarters. Some GAs are experimenting with transforming divisions to brigades. At the same time, new equipment is being introduced into the forces and older equipment retired, both of which could have an impact on force structure. Other changes are bound to result from the PLA's adoption of the doctrine of fighting "Local War Under Modern High Technology Conditions" in the past few years. The variable TO&Es of Group Armies of the past decade appear to be even more variable now.

Division (*shi*)

Over the past several decades the principal combat units of the PLA have been its infantry, tank, artillery, and AAA divisions. (Around 1998, the PLA began to call its tank (*tanke*) units "armored" (*zhuangjia*) units to reflect their more combined arms nature.) The traditional structure of an infantry or armored division consists roughly of:

- Three regiments (*tuan*) of the basic combat arm that defines the division, each of which are composed of three battalions (*ying*) and additional support units
- A tank regiment if the division is an infantry division or a mechanized infantry regiment if the division is an armored division (in lower readiness category divisions this unit may be battalion size or not present at all)

Army, which consists of three airborne divisions. Some writers may consider units that have organic helicopter transportation assets as "airborne," whereas in US terminology helicopter-borne operations are termed "air mobile."

- An artillery regiment with a mixture of tube artillery and multiple rocket launcher (MRL) battalions
- An AAA regiment or battalion
- A communications battalion or company (*lian*)
- An engineer battalion or company
- A reconnaissance battalion or company
- A chemical defense company
- A guard company to provide security for division leaders and the command post
- Several combat service support units, such as transportation, supply and maintenance, and medical units⁷⁶⁴

Infantry divisions compose the bulk of the ground forces and have been designated simply as “infantry” divisions⁷⁶⁵ (*bubing shi*), motorized divisions (*motuohua shi*), or mechanized divisions (*jixiehua shi*). Over the past 15 years, nearly all divisions have been equipped with enough trucks to make them road-transportable, increasing their mobility over their foot infantry days. Mechanized divisions are relatively few and are equipped with tracked or wheeled armored personnel carriers (APC) or infantry fighting vehicles. *The Military Balance 2000-2001* counts seven mechanized divisions.⁷⁶⁶ The mechanized infantry units, which are organic to armored divisions, are also equipped with tracked or wheeled armored personnel carriers so that they can keep up with the division’s tank regiments.

Artillery and AAA divisions had slightly different structures and, instead of having regiments directly subordinate to division headquarters, sometimes could be composed of brigades, which are composed of regiments or battalions, along with other

⁷⁶⁴ As an US army attaché stationed in Beijing, the author visited officially and received briefings on four different PLA infantry divisions. Usually division organization was explained by providing only the gross number of regiments, with few specifics about the complete division structure, manpower, and equipment. The information used to outline the basic division structure described above is based on those visits, recent conversations with PLA officers, and tables in the Defense Intelligence Agency, *Handbook of the Chinese People’s Liberation Army*, Washington, D.C.: Defense Intelligence Agency, 1984; and Harlan W. Jencks, *From Muskets to Missiles: Politics and Professionalism in the Chinese Army, 1945-1981*, Boulder: Westview Press, 1982.

⁷⁶⁵ Sometimes the term “infantry” is absent in a unit’s designation and its infantry structure assumed.

⁷⁶⁶ International Institute for Strategic Studies, *The Military Balance, 2000-2001*, London: Oxford University Press, 2000, p. 194. The 2000 *Directory of PRC Military Personalities* also holds seven mechanized infantry divisions: three in the 38th Group Army, two in the 39th Group Army, the 127th Light Mechanized Infantry Division in the 54th Group Army, and the 1st Amphibious Mechanized Division in the 1st Group Army. The 1st Amphibious Mechanized Division is a new designation in 2000.

support units, such as supply and maintenance units. The various types of guns, howitzers, or multiple rocket launchers that composed the artillery divisions would have an impact on the structure of an artillery division. Unlike tank and armored divisions that have artillery and AAA units as part of their organic structure, artillery and AAA divisions would not have organic infantry or tank units.

The size of full strength divisions varies according to division type and the equipment assigned to the unit. The following chart provides gross estimates of manpower assigned to divisions, regiments, and battalions in infantry, armor, artillery, and AAA units. These numbers are approximate estimates only; exact numbers will vary according to the type of unit (for example, motorized or mechanized infantry) and specific equipment assigned:⁷⁶⁷

	Division	Regiment	Battalion
Infantry	12,000-13,000	2,800	700
Armor	10,000	1,200	175
Artillery	5,000-6,000	1,100	275
AAA	5,000	1,000	250

Division commanders (*shi zhang*) are Senior Colonels; regiments are commanded by Colonels; battalions by Lieutenant Colonels; and companies by Captains. Commanders down to battalion level are assisted by deputy commanders, political commissars at regimental level or political instructors at battalion level (*zhengzhi jiaodao yuan*), and headquarters staffs. Company commanders have a deputy company commander and a political instructor (*zhengzhi zhidao yuan*) (or two), but no staff.

During the 500,000-man reduction of 1996 to 2000, several divisions were demobilized (or possibly transformed into reserve units), 14 were reassigned to the PAP,⁷⁶⁸ a few were transferred from one Group Army to another, one was transformed

⁷⁶⁷ See Defense Intelligence Agency, *Handbook of the Chinese People's Liberation Army*, Appendix C, G, J, and K; and Jencks, *From Muskets to Missiles: Politics and Professionalism in the Chinese Army, 1945-1981*, Appendix A. A PLA officer has told the author that "independent" divisions may be larger than those assigned to Group Armies.

⁷⁶⁸ See Dennis J. Blasko and John F. Corbett, Jr., "No More Tiananmens: The People's Armed Police and Stability, 1997," in *China Strategic Review*, Vol. III, Issue 1, Spring 1998, pp. 80-103, for details of the evidence supporting transfer of the 14 PLA divisions to the PAP. Though the majority of these divisions probably were infantry divisions of lower readiness category, there is some evidence that an artillery unit may also have been transferred. The new PAP units can be identified, and distinguished from PLA units and other PAP units, by the four-digit numbers, from 8610 to 8750, assigned to them.

into a second PLA Navy marine unit, and several were downsized to brigade level. Though the following figures can only be considered estimates, a comparison of *The Military Balance 1996/97* (at the beginning of the reduction) with *The Military Balance 2000-2001* (at the end of the reduction) reveals that there were 29 fewer infantry divisions in 1998 than 1996. Of these 29 divisions, 13 can be seen to have been downsized into brigades and 16 eliminated from the active duty PLA ground forces. On the other hand, it appears that two armored units, one division and one brigade, were demobilized. Because of the nature of these numbers, they should be considered indicators of the trends in the reduction and reorganization in the PLA, and not final, definitive order-of-battle figures.

Subordination/ Type Unit	Group Armies Div/Bde	Independent Div/Bde	Local Forces Div/Bde	Total Div/Bde/Total
Infantry Units, 1996	73/0	5/2	12/5	90/ 7/97
Infantry Units, 2000	44/13	5/2	12/5	61/20/81
Armored Units, 1996	11/13	1/0	0/0	12/13/25
Armored Units, 2000	10/12	1/0	0/0	11/12/23

Sources: *The Military Balance, 1996/97*, p. 179; and *The Military Balance, 2000-2001*, p. 194.⁷⁶⁹

According to the US Department of Defense Report to Congress Pursuant to the FY2000 National Defense Authorization Act, as of 1999, "China's ground forces are comprised of some 40 maneuver divisions and approximately 40 maneuver brigades."⁷⁷⁰ (Infantry and armored units are considered "maneuver" elements.) *The Military Balance's* numbers total 72 divisions and 32 brigades for a total of 104 total maneuver units, significantly larger than the Pentagon's figures, which probably are based on more current information.⁷⁷¹ Until the reduction and reorganization within the PLA is

⁷⁶⁹ *The Military Balance* also includes an additional "87 infantry regiments/battalions" as local forces. These could be border defense units or garrison units, but have not been included in the chart for their lack of specificity.

⁷⁷⁰ US Department of Defense Report to Congress Pursuant to the FY2000 National Defense Authorization Act, June 2000.

⁷⁷¹ International Institute for Strategic Studies, *The Military Balance, 2000-2001*, London: Oxford University Press, 2000, p. 194. The author's ground force order-

finished and the Chinese government provides the world with what it heretofore considered "classified information," any attempt at such "bean counting" will likely contain significant errors.

Brigade (*lu*)

In addition to infantry, armored, artillery, and AAA divisions, for many years the PLA has also had brigades formed around these combat arms. Brigades are commanded by a Senior Colonel and could be composed of several battalions, but with significantly smaller combat service support units than found in divisions. Independent brigades are likely to have regiments as intermediate headquarters between brigade and battalion level. Brigades probably have about one-third to one-half the personnel strength of divisions of that same arm.

The recent experimental shift from divisions to brigades is intended to make PLA combat units more rapidly deployable and flexible. It is likely that divisions that have been downsized to brigades have consolidated their units to one or two centrally located bases in order for them to be able to deployed quickly and train together on a regular basis. In the past, it was not unusual for the subordinate regiments of a division to be stationed along a strip of land up to 100 kilometers long. Such great physical separation between units in the same division would make combined arms training more difficult and expensive, and therefore less likely to occur, than if the units were based more closely together.

As in the past, the exact structure of the new brigades is likely to depend on their location, mission, and readiness level. Variations in TO&E because of different equipment mix is also likely.

In December 1998, the author had the opportunity to visit the 6th Artillery Brigade in Pinggu in Beijing municipality. Previously this brigade was a division and had recently undergone transformation to a brigade structure. The brigade was commanded by a Senior Colonel and was said to be manned by about 340 officers, 220 Noncommissioned Officers (NCOs), and 1700 enlisted men. Its major subordinate units were five battalions, each with 18 guns or rocket launchers.⁷⁷² The brigade was organized as:

- 1st Battalion, 152mm towed gun-howitzers
- 2nd and 3rd Battalions, 130mm towed field guns
- 4th Battalion, 122mm self-propelled MRLs
- 5th Battalion, 120mm self-propelled anti-tank guns

of-battle listing in a following section of this essay accounts for 43 infantry divisions and 19 brigades (not including coastal defense units) and 9 armored divisions and 13 brigades for a total of 84 maneuver divisions/brigades in 2000/2001. Like any attempt to account for details of the PLA's specific order-of-battle, the author's numbers are not to be considered authoritative.

⁷⁷² The briefing provided at the 6th Artillery Brigade was the most detailed the author had ever received during visits to PLA units.

The 6th Artillery Brigade is one of several "show-units" in the Beijing area. At the same time, the author was told that another unit normally open to visitors, the 196th Infantry Division near Tianjin, was in the process of being downsized to a brigade and was not accepting visitors.⁷⁷³

Rapid Reaction Units or Forces (*kuaisu fanying budui*)

The creation of Rapid Reaction Units (RRUs) was a major development following the PLA's doctrinal and organization changes of the mid and late 1980s. The PLA Air Force's 15th Airborne Corps is the Chinese military's primary strategic RRU.⁷⁷⁴ The army also has RRUs in each MR, assigned to the Group Armies. Some ground forces RRUs may have national-level responsibilities, but others primarily have local/regional missions.

According to *The Military Balance*, RRU are ready to mobilize in 24 to 48 hours.⁷⁷⁵ RRUs are generally considered to receive the most modern equipment as it enters the force and have greater opportunities for training than other units. The size of RRUs probably varies from battalion up to division level. According to the FY 2000 DOD Report to Congress, "Approximately 14 of [PLA ground force] divisions are designated 'rapid reaction' units: combined arms units capable of deploying by road or rail within China without significant train-up or reserve augmentation."

PLA ground force units are still relatively inexperienced in deploying using aircraft. Aircraft are used for administrative troop deployments and limited resupply into Tibet. Some units have also experimented with moving headquarters elements and troops

⁷⁷³ Other ground force units in the Beijing area open to visitors include the 6th Armored Division, headquartered at Nankou, and the Beijing 3rd Garrison Division, headquartered at Shunyi. Each MR has a certain number of "show units," which are open to visitors. Visits to these units are highly scripted and controlled, consisting usually of a briefing, at which questions may or may not be asked, a walk through barracks and support facilities, and a series of demonstrations. The demonstrations concentrate on physical training, individual marksmanship and crew drill on various weapons, and squad or platoon level assaults. There is certainly a "Potemkin Village" quality to these units and only limited judgments about the state of PLA training can be made from such visits, though the troops are obviously well disciplined and in excellent physical shape. The types of drills exhibited at show units are common throughout the ground forces and represent basic skill levels that may be found in other units. However, in order to make an informed assessment of PLA training at higher unit levels, i.e., company and above, it would be necessary for a knowledgeable observer to be allowed extended access to larger scale training exercises. It is worth noting that when the state of US-China relations is good, the PLA increases access to units and the scope of topics that can be discussed with the American visitors during these visits.

⁷⁷⁴ PLA Navy marine units are also designated as RRU.

⁷⁷⁵ *The Military Balance*, 1999-2000, p. 186.

by air. However, large scale air movements, including transportation of the heavy equipment organic to ground force units, have not been reported. Therefore, as the DOD report quoted above states, the most likely form of deployment for RRUs will be by road or rail.

Army Aviation Units/Groups/Regiments (*lujun hangkongbing budui/dadui*)

In the mid-1980s, the Chinese military leadership decided to develop a heliborne (air mobile) capability and formed the Army Aviation Bureau in 1986, with the first operational regiments activated in 1988.⁷⁷⁶ However, the acquisition of helicopters and their deployment into the forces have been relatively limited. Currently, *The Military Balance* assesses the PLA ground forces to have seven helicopter regiments.⁷⁷⁷ The *Directory of PRC Military Personalities* calls helicopter units subordinated to Group Armies "Groups," and the others that are subordinated to MR headquarters "Regiments."

The PLA has a combination of helicopters built in China and others purchased from Russia, Europe, and the United States. Estimates of the numbers of helicopters assigned to the PLA ground forces vary. *The Military Balance* counts about 212 of all types; while independent analyst Luke Colton, who has performed several detailed studies of Chinese military helicopters, accounts for approximately 223.⁷⁷⁸ No matter which estimate is used, the number of helicopters assigned to such a numerically large ground force is extremely small, which means that the number of combat units that have had the opportunity to train with helicopter units and become proficient in air mobile operations is very limited.

⁷⁷⁶ "Army Helicopters Overfly Tiananmen Square," *Xinhua*, in English, 1 October 1999 in FBIS-CHI-1999-0930 for date of formation of the Army Aviation Bureau; and Luke G.S. Colton, "Bamboo Blades: The Rise of China's Army Aviation," *Rotor & Wing*, January 2000, pp. 42-47, for date of first Army Aviation regiments.

⁷⁷⁷ *The Military Balance*, 1999-2000, p. 186

⁷⁷⁸ Colton, p. 44. Colton notes that these are numbers of helicopters acquired or built. The actual number of *operational* aircraft may be considerably less, especially for the Blackhawks, which have suffered from lack of spare parts due to the U.S. embargo imposed after the Tiananmen massacre of 1989. In personal correspondence with the author (March 2001), Colton has recently modified the total number of helicopters to 227 aircraft, with some adjustments to the numbers for specific aircraft types.

Helicopter Type	Military Balance	Colton	Helicopter Type
Mi-17	24	24	Mi-17
Mi-171	30	30	Mi-171
Mi-8	30	30	Mi-8
Mi-6	3	12	Mi-6
Z-9/WZ-9 ⁷⁷⁹	73	73	Z-9/WZ-9
SA-342 (Gazelle)	8	8	SA-342 (Gazelle)
S-70 Blackhawk	20	24	S-70 Blackhawk
Z-11	20	12	Z-11
Z-8	4	4	Z-8
		6	AS-332
Total	212	223	Total

Sources: *The Military Balance, 2000-2001*, p. 194; *Rotor & Wing*, January 2000, p. 44.

The presence of the large, Russian-made heavy-lift Mi-6, reported by the Hong Kong press, is not certain, but is certainly possible. According to Colton, the six Eurocopter AS-332 Super Puma are used for VIP transport; the Chinese-manufactured Z-11 is used for training, reconnaissance, and command and control. Colton also reports that China has been developing the Z-10, a new tactical transport/utility helicopter, since 1994 or 1995.⁷⁸⁰

The helicopters listed above must perform a variety of missions: troop transport, attack, reconnaissance, command and control, medical evacuation, electronic warfare, special operations, training, and VIP support. It is likely that most helicopter units have a mix of helicopter types that perform various missions. The size of helicopter units probably varies from about 25 to 30 aircraft per unit. These aircraft must then be shared among the many army units in a particular Military Region.

During the widespread flooding of 1998, PLA helicopter units often were reported to support rescue operations conducted by the PLA, PAP, or local security personnel. This sort of operational employment is very useful for newly formed units. Units probably had to deploy to a forward operating base. The helicopter pilots and crews flew in arduous conditions, unit staffs had to prepare plans much as they would in a combat

⁷⁷⁹ The Z-9 is a licensed-manufactured version of the Eurocopter AS-365N2 Dauphin. "Z" stands for *zhishengji*, helicopter; WZ is *wuzhuang zhishengji*, armed helicopter.

⁷⁸⁰ Luke G. S. Colton, "Making Sense of a Mystery: China's Z-10 Helicopter Program," paper for the 2000 CAPS/RAND Conference, August 4-6, 2000.

situation, refueling problems had to be solved, and supply and maintenance operations had to be accomplished. The wear and tear the helicopters suffered was probably worth the training value of such a deployment.

Special Operations Forces (*tezhong zuozhan budui*)

According to the FY2000 DOD Report to Congress, "Particularly since the 1991 Persian Gulf conflict, the PLA has devoted considerable resources to the development of Special Operations Forces (SOFs). These units apparently are an integral element of ground force modernization and likely have been assigned specific missions or tasks in a variety of Taiwan contingency operations. These missions or tasks could include conducting reconnaissance and surveillance; locating or destroying C4I [command, control, communications, computers, and intelligence] assets, transport nodes, and logistics depots; capturing or destroying airfields and ports; and destroying air defense facilities." Because of China's limited satellite and long-range airborne reconnaissance capabilities, PLA SOF units, if properly trained, equipped, and deployed, could fill an important intelligence gap by performing essential strategic reconnaissance missions, such as post-strike battle damage assessment.

The *Directory of PRC Military Personalities* has identified SOF or special reconnaissance units in all MRs. According to a Chinese source, SOF units may vary in size from 100 to 1000 personnel.⁷⁸¹

Like helicopter units, PLA SOF units are relatively few and small. It is likely that SOF units train closely with helicopter units in the MRs in which they are assigned. SOF units are also likely to be trained to be inserted by parachute. The development of the PLA's special operations capability merits greater attention in the coming years.

REDUCTIONS AND REORGANIZATIONS UNDERWAY SINCE 1996

At the completion of the 500,000-man of the late 1990s, the ground forces of the PLA should number less than 1,800,000.⁷⁸²

A number of methods were used to reduce and reorganize the forces:

- Complete units were totally demobilized with their personnel released from active duty and equipment retired, put in storage, or transferred to other active, reserve, or militia units.⁷⁸³ Many demobilized soldiers are expected to have been assigned

⁷⁸¹ Author's conversation with PLA officer, May 2000.

⁷⁸² Unlike most other armies, the PLA includes its uniformed civilians (*wenzhi ganbu*) in its active duty personnel strength. China has not announced what percentage of the force is civilian, but the author has been told by a PLA civilian that perhaps 20-25% of the PLA's strength could be civilians.

⁷⁸³ When President Jiang Zemin announced the 500,000-man reduction of the PLA in September 1997, he also said the reserves and PAP would be expanded.

to the reserves. The exact number and identification of demobilized units have not been made public, nor has the number of new reserve units been announced.

- Complete units, or major portions of units, were transferred to the PAP. Fourteen PLA divisions are believed to have been transferred to the PAP since 1996. Equipment not needed in the PAP could be retired, put in storage, or transferred to the reserves or militia.
- Subordinate elements of demobilized headquarters and units were transferred to other ground forces headquarters.

At least one unit was transferred to another service in the PLA. One former PLA division in the Guangzhou MR is reported to have been transformed into a second marine brigade in the PLA Navy.⁷⁸⁴ Many divisions were downsized to brigades.

As mentioned earlier, three Group Army headquarters were disbanded during the reduction: 28th GA in Beijing MR, 67th GA in Jinan MR, and 64th GA in Shenyang MR. Though many units subordinate to these GA headquarters were demobilized or transformed into PAP and reserve units, some elements of these Group Armies remained active and were transferred to other ground force headquarters.

Group Armies do not appear to have been completely standardized. Many seem to be moving toward a structure of two infantry divisions or brigades, an armored division or brigade, and a variety of artillery and support units similar to their previous structure. The specific organization of the Group Armies will be task-organized according to location, mission, and equipment available. They also appear to be increasingly organized for combined arms operations and rapid deployment.

GROUND ORDER-OF-BATTLE SPECIFICS

Listed below are the details as best can be deduced of the major combat units assigned to each Military Region and Group Army. Units included are infantry, armored, artillery, AAA, air defense, army aviation (helicopter), special operations/reconnaissance, and electronic warfare units. Combat support and combat service support units, such as engineers, communications, chemical defense, and transportation, are not included for the sake of simplicity.

Whenever possible, unit type and designators (such as 6th Artillery Brigade), honorific designator if known (such as Red Army Division), military unit cover designators (MUCD),⁷⁸⁵ and location are listed.

The primary sources for this listing are the *Directory of PRC Military Personalities, October 1999* and *Directory of PRC Military Personalities, October 2000*,

⁷⁸⁴ Conversation with US official, May 2000.

⁷⁸⁵ MUCD (*junshi danwei daihao*) are five-digit numbers assigned to units of regimental and higher level. They are similar to unit-specific zip codes. Though there is a system for their assignment, the numerous reorganizations over the years have greatly complicated the system. In October 2000, the MUCD system that had been used for decades was changed. All MUCDs in this paper are from the old, pre-2000 system.

with adjustments made according to additional material provided by Ellis Melvin, the author's experience, and discussion with PLA officers. The Chinese website <http://cqch.com.cn/zgjs/jtj.htm> was used for a few specific unit designations not included in the *Directory*.

Because of continuing reorganizations and experimentation, and uncertainties and gaps in the database, this listing cannot be considered authoritative, but the best guess possible.

Beijing MR

Five Group Armies are located in the Beijing MR: the 24th with headquarters in Chengde, 27th in Shijiazhuang, 38th in Baoding, 63rd in Taiyuan, and 65th in Zhangjiakou.⁷⁸⁶

The 28th GA headquarters (formerly the 51361 Unit) in Datong has been disbanded, along with its AAA brigade (former 51363 Unit). The 28th's armored division (the 52875 Unit) appears to have been downsized to a brigade and may be an independent unit subordinate to MR headquarters.⁷⁸⁷ An infantry brigade, which was previously a division (51366 Unit), and artillery brigade (51379 Unit) of the 28th been resubordinated to the 63rd GA.

The Central Guard Unit (57003 Unit),⁷⁸⁸ responsible for the security of senior government, party, and military leaders, has several barracks in central Beijing and in northwest Beijing near the Western Hills. The Central Guard Unit is not subordinate to Beijing MR headquarters, but reports to the CMC through the GSD.

The Beijing Garrison and Tianjin Garrison are subordinate to Beijing MR headquarters and have more combat units than most other garrison headquarters. The Beijing Garrison has two subordinate divisions: the 1st Garrison Division that performs guard duties for the many PLA headquarters in the city and "courtesy patrol" duties to maintain order among the troops when they are out of their barracks, and the 3rd Garrison Division, which is structured for external defense and is composed of three infantry regiments, an armor regiment, an artillery regiment, and an AAA regiment. The 11th Regiment of the 3rd Garrison Division, located in Huairou northeast of Beijing, is open to foreigners. The 196th Infantry Brigade, in Yangcun near Tianjin, of the Tianjin Garrison is also open to foreigners.

The *Directory of PRC Military Personalities* lists an unidentified armored division of the 24th GA in Tangshan, which is just to the northeast of Tianjin. It likely

⁷⁸⁶ GA headquarters are in the cities identified; some GA elements, usually combat support and combat service support elements, and perhaps a maneuver division, may also be located in or near the GA headquarters city. The remaining GA elements are located in nearby cities, usually in the same province.

⁷⁸⁷ *Directory of PRC Military Personalities*, October 2000, p. 159.

⁷⁸⁸ Jencks, *From Muskets to Missiles*, p. 139. The predecessor to this organization was the 8341 Unit.

that this division is actually the 1st Armored Division, which is located east of Beijing in the northern part of Tianjin municipality near Tangshan.

The 27th GA's former 81st Division in Tianjin has been transformed into a PAP unit.⁷⁸⁹

The MR's helicopter unit is subordinate to the 38th Group Army in Baoding. The MR Special Operations unit is located in northwest Beijing.

24GA (52831 Unit), Chengde, Hebei

70 Division

71 Division (Either the 70 or 71 division is likely to be the 52824 Unit)

1 Armored Division, northern Tianjin municipality

Artillery Brigade (51403), Changli, Hebei

AAA Brigade (51404), Qinhuangdao, Hebei

27GA (51002 Unit), Shijiazhuang, Hebei

Unidentified (UI) Motorized Infantry Brigade (51014 Unit)

Armored Brigade (51409 Unit)

Artillery Brigade (51410 Unit), Handan, Hebei

AAA Brigade (51411 Unit), Shijiazhuang, Hebei

38GA Mechanized (51034 Unit), Baoding, Hebei

112 Mechanized Infantry Division (51033 Unit), Xinsheng, Hebei

113 Mechanized Infantry Division (51036 Unit), Baoding, Hebei

114 Mechanized Infantry Division, Taihangshan, Hebei

6 Armored Division (52884 Unit), Nankou, Beijing

6 Artillery Brigade (52962 Unit), Pinggu, Beijing

Air Defense Guided Missile Brigade (52966 Unit)

Helicopter Group (51356 Unit), Baoding, Hebei

63GA (52935 Unit), Taiyuan, Shanxi

188 Motorized Infantry Brigade (52941 Unit), Xinzhou, Shanxi

UI Infantry Brigade (51366 Unit) (resubordinated from 28GA)

UI Infantry Brigade (51384 Unit)

Armored Brigade, Yuncheng, Shanxi

Artillery Brigade (51379 Unit), Xiaoyi, Shanxi (resubordinated from 28GA)

AAA Brigade (probably 51296 Unit in Taiyuan, Shanxi)

65GA (51056 Unit), Zhangjiakou, Hebei

193 Division ("Red 1st Division") (51052 Unit), Xuanhua, Hebei

UI Motorized Infantry Brigade (51396 Unit)

⁷⁸⁹ *Directory of PRC Military Personalities*, August 1997, p. v.

Armored Brigade
 Artillery Division (52973 Unit), Huailai, Hebei
 AAA Brigade (52968 Unit), Zhangjiakou, Hebei

Beijing Garrison

1st Garrison Division
 3rd Garrison Division (51116 Unit), Shunyi

Tianjin Garrison

196 Infantry Brigade (52854 Unit), Yangcun, Tianjin municipality

Other Units Subordinate to MR

UI Armored Brigade
 Special Operations Dadui (51425 Unit), northwest Beijing

Chengdu MR

Two Group Armies are located in the Chengdu MR: the 13th GA in Chongqing and the 14th GA in Kunming. The units subordinate to the Chongqing Garrison have not been identified. The 1999 *Directory of PRC Military Personalities* did not explain why five border defense regiments, two artillery regiments, and an AAA regiment, which were listed in the 1998 *Directory*, were not included in the latest edition. Instead, only two brigades are listed in Tibet in 1999 and 2000.

The 14th GA's former 42 Division has been transferred to the PAP as the 8750 Unit. Although some sources include a helicopter unit subordinate the 13th GA, the *Directory of PRC Military Personalities* lists the region's helicopter unit as subordinate to the Military Region.

13GA (56005 Unit), Chongqing

37 Division (56013 Unit), Chongqing
 149 Motorized Infantry Division (56016 Unit), Emei, Sichuan
 Armored Brigade (56017 Unit), Pengzhou, Sichuan
 Artillery Brigade (56014 Unit), Chongqing
 AAA Brigade (56018 Unit), Mianyang, Sichuan

14GA (35201 Unit), Kunming

40 Division (35108 Unit), Dali, Yunnan
 49 Division (35208 Unit), Kaiyuan, Yunnan
 Armored Brigade (35221 Unit)
 Artillery Division (35304 Unit), Kunming, Yunnan
 AAA Brigade (35220 Unit), Kunming, Yunnan

Chongqing Garrison

Other Units Subordinate to MR

Army Aviation Regiment (58306 Unit)

“Cheetah” Special Operations Group (56294 Unit)
 Electronic Warfare Regiment (56106 Unit)
 UI Mountain Infantry Brigade (56021 Unit), Nyingchi, Xizang
 UI Mountain Infantry Brigade (56023 Unit), Xizang

Guangzhou MR

Two Group Armies are located in the Guangzhou MR: the 41st GA in Liuzhou and the 42nd GA in Huizhou. The former 164 Division (53508 Unit) in Zhanjiang is reported to have been transformed to become the second PLA Navy marine brigade.

The Hong Kong Garrison's organization was well defined during the period before and after Hong Kong's reversion to PRC sovereignty in 1997. The garrison is commanded by a Major General and is a joint force about 10,000 strong, composed of an infantry brigade, naval unit, and a PLA Air Force helicopter unit. A logistics support base for the garrison is located in Shenzhen. Only about 4,000 troops are present in Hong Kong at any one time, as elements rotate back and forth among its barracks' locations in Hong Kong and across the border in Guangdong.

The Macao Garrison consists of about 500 personnel and is also commanded by a Major General. It is primarily an army unit, but has small contingents of PLA Air Force and Navy personnel. The unit is made up of an armored infantry (mechanized) company, motorized infantry (truck-mobile) company, a guard and reconnaissance unit, a communications unit, and other headquarters elements. On December 20, 1999, upon Macao's reversion to PRC sovereignty, ten wheeled armored vehicles and about 60 other trucks and vehicles entered Macao. The Macao Garrison's infantry and guards and reconnaissance units were transferred from the Hong Kong Garrison. Just as the Hong Kong Garrison as a logistics base outside of the Special Administrative Region, the Macao Garrison has a logistics support base in Zhuhai.⁷⁹⁰

In addition to the PLA Air Force helicopter unit assigned to the Hong Kong Garrison, an army helicopter unit is assigned to the Guangzhou MR.

41GA (53010 Unit), Liuzhou, Guangxi

121 Infantry Division (53013 Unit), Guilin, Guangxi
 123 Division (53023 Unit), Guigang, Guangxi
 Armored Brigade (53063 Unit), Guilin, Guangxi
 Artillery Brigade (53061 Unit)
 AAA Brigade (53062 Unit)

⁷⁹⁰ “PLA Macao Garrison, Picked Unit” *Ta kung pao*, 14 November 1999, in FBIS-CHI-1999-1206; “Chinese Troops Enter Macao to Take Up Defense Duties,” “‘Backgrounder’: Armored Infantry of PLA Macao Garrison,” “‘Backgrounder’: Macao Garrison Motorized Infantry Unit,” and “‘Backgrounder’: Macao Garrison Guard, Reconnaissance Unit,” *Xinhua* in English, 20 December 1999, in FBIS-CHI-1999-1220.

42GA (53200 Unit), Huizhou, Guangdong

124 Motorized Infantry Division (53203 Unit), Boluo, Guangdong
 144 Division (53503 Unit), Shantou, Guangdong
 UI Division (53806 Unit)
 Armored Brigade (53263 Unit), Huadu, Guangdong
 Artillery Division (53802 Unit), Qujiang, Guangdong
 Air Defense Brigade

Hong Kong Garrison (53300 Unit)

Logistics Base (53310 Unit), Shenzhen
 Infantry Brigade (53320 Unit)
 Naval Dadui (38081 Unit)
 Helicopter Regiment (PLAAF) (39968 Unit)

Macao Garrison**Other Units Subordinate to MR**

UI Division, Hainan
 Army Aviation Regiment (54489 Unit)
 Special Operations Dadui (54488 Unit), Guangzhou, Guangdong
 Electronic Warfare Regiment (54468 Unit)
 Technical Rapid Reaction Unit (53180 Unit)

Jinan MR

Three Group Armies are located in the Jinan MR: the 20th GA in Kaifeng, the 26th GA in Laiyang, and the 54th GA in Xinxiang. The 67th GA headquarters (54862 Unit), in Zibo, Shandong, has been disbanded. The 67th's 199 Division (54871 Unit) in Zhoucun, Shandong has been resubordinated to the 26th GA, as other former 67GA units may have been.

The *Directory of PRC Military Personalities* holds the helicopter unit in Xinxiang as possibly subordinate to the GSD; other sources list it as being subordinate to the 54th GA, whose headquarters also is located in Xinxiang. In either case, it is likely that this helicopter unit trains primarily with 54th GA units.

20GA (54631 Unit), Kaifeng, Henan

58 Motorized Infantry Brigade (54642 Unit), Xuchang, Henan
 UI Motorized Infantry Brigade (54650 Unit)
 11 Armored Brigade (54674 Unit), Zhumadian, Henan
 Artillery Brigade, Kaifeng, Henan
 AAA Brigade (54635 Unit), Shangqiu, Henan

26GA (54685 Unit), Laiyang, Shandong

137 Division
 199 Division ("Red Army Division") (54871 Unit), Zibo, Shandong
 (resubordinated from 67GA)

UI Division (54691 Unit)
 UI Motorized Infantry Brigade, Tai'an, Shandong
 Armored Division/Brigade, Laiyang, Shandong
 Artillery Division
 AAA Brigade (54762 Unit), Qingdao, Shandong

54GA (54774 Unit), Xinxiang, Henan

127 Light Mechanized Infantry Division (54784 Unit), Luoyang, Henan
 UI Motorized Infantry Division (54854 Unit), Anyang, Henan
 UI Motorized Infantry Brigade
 Armored Brigade (54771 Unit), Zhenping, Henan
 Artillery Brigade (54772 Unit), Luoyang, Henan
 AAA Brigade (54773 Unit), Zhengzhou, Henan

Units Subordinate to MR

Army Aviation Regiment, Xinxiang, Henan
 Special Operations Dadui
 Electronic Warfare Regiment

Lanzhou MR

Two Group Armies are located in the Lanzhou MR: the 21st GA in Baoji and the 47th GA in Lintong. In addition to these two Group Armies, there are several independent divisions and brigades in the vast western expanses of China.

An unidentified division in Xinjiang (the 36131 Unit) is believed to have become the PAP 8660 Unit. The 47th GA's former 139 Division also has probably been transformed into the PAP 8670 Unit.

21GA (84810 Unit), Baoji, Shaanxi

UI Division (84801 Unit), Zhangye, Gansu (possibly undergoing change in status)
 61 Division ("Red Army Division") (84802 Unit), Tianshui, Gansu
 62 Motorized Infantry Brigade (84808 Unit), Wuwei, Gansu
 12 Armored Division (84701 Unit), Jiuquan, Gansu
 Artillery Brigade (84830 Unit), Changshantou, Ningxia
 AAA Brigade (84506 Unit), Jiuquan, Gansu

47GA (84870 Unit), Lintong, Shaanxi

UI Division (84803 Unit)
 141 Division
 Armored Brigade (84850 Unit), Chengzhou, Shaanxi
 Artillery Brigade (84860 Unit), Miaobaozhen, Tongchuan, Shaanxi
 AAA Brigade (84807 Unit), Pucheng County, Shaanxi

Units Subordinate to MR

Red Army Division (36101 Unit), Xinjiang MD
 UI Highland Motorized Division (36220 Unit), Karakorum Mountains⁷⁹¹
 8 Infantry Division (36146 Unit), Qiaziwan, Shawan, Xinjiang
 UI Armored Division, Nanjiang, Xinjiang MD⁷⁹²
 UI Artillery Brigade (84504 Unit), Qinghai
 Helicopter Regiment, Xinjiang MD
 Special Operations Dadui (84835 Unit), Qingtongxia, Ningxia
 ECM Regiment (84598 Unit), Lanzhou, Gansu

Nanjing MR

Three Group Armies are located in the Nanjing MR: the 1st GA in Huzhou, 12th GA in Xuzhou, and the 31st GA in Xiamen. The 1st GA's former 2 Division (83016 Unit) probably was transferred to the PAP to become the 8690 Unit. The division from the 31st GA apparently has been redesignated the PAP 8710 Unit.

Many units in this MR are trained and equipped for amphibious warfare. An amphibious armored brigade has been identified in the 31st GA. The 2000 *Directory of PRC Military Personalities* identifies a "Hi-Tech Regiment" (32532) subordinate to the 31st GA. The 2000 *Directory of PRC Military Personalities* also identifies for the first time a helicopter unit in the MR, which is assumed to have been operational for several years.

1GA (83011 Unit), Huzhou, Zhejiang

1 Amphibious Mechanized Infantry Division (83013 Unit), Hangzhou, Zhejiang
 UI Motorized Infantry Brigade⁷⁹³
 Armored Division
 Artillery Division
 Air Defense Brigade

⁷⁹¹ The web page www.plamilitary.com/armydeployment.html provides the designator 11th for the "Highland Motorized Division." The web page also identifies the 4th, 6th, and 8th motorized infantry divisions. This source also notes two independent regiments, 10 border defense regiments, and an additional artillery and AAA brigade greater than what is listed above. This web page, however, may not have taken into account some of the recent reorganization and structural changes of the past few years.

⁷⁹² This unit was newly identified in the 2000 *Directory of PRC Military Personalities*.

⁷⁹³ This unit may be downsized from the former 181 Division (83318 Unit) in Wuxi.

12GA (83226 Unit), Xuzhou, Jiangsu

35 Division, east Anhui

36 Division (83235 Unit), north Jiangsu

179 Motorized Infantry Brigade ("Linfen Brigade")(83123 Unit), Nanjing, Jiangsu

UI Motorized Infantry Brigade⁷⁹⁴

2 Armored Division (83567 Unit), Xuzhou, Jiangsu

Artillery Brigade (83230 Unit), Xuzhou, Jiangsu

AAA Brigade (83422 Unit), north Jiangsu

31GA (32404 Unit), Xiamen, Fujian

91 Motorized Infantry Division

Amphibious Armored Brigade (32407 Unit), Changtai, Fujian

Artillery Brigade, Quanzhou, Fujian

Air Defense Brigade (32525 Unit)

Shanghai Garrison

UI Coastal Defense Brigade (83304 Unit)

UI Coastal Defense Brigade (83318 Unit)

UI Coastal Defense Brigade (83330 Unit)

Other Units Subordinate to MR

UI Division (32430 Unit), Quanzhou, Fujian

UI Coastal Defense Division (32833 Unit), Fujian MD

UI Coastal Defense Division, Fujian MD

UI Coastal Defense Brigade, Fujian MD

Helicopter Regiment (83627 Unit)

Special Operations Dadui (83423 Unit)

Shenyang MR

Four Group Armies are located in the Shenyang MR: the 16th in Changchun, 23rd in Harbin, 39th in Liaoyang, and the 40th in Jinzhou. In the mid-1990s, the 39th's headquarters was moved from Yingkou to its current location in Liaoyang.

The 64th GA headquarters (81065 Unit) in Dalian has been disbanded. Like the 39th GA, in the mid-1990s, the 64th's headquarters moved from Benxi to Dalian. The 64th's 190 Mechanized Infantry Division (81233 Unit) has been resubordinated to 39th GA, while its 191 Motorized Infantry Brigade (81242 Unit) in Dandong is still active. The status of the remaining elements of the 64th GA is unknown.

⁷⁹⁴ This unit was newly identified in the 2000 *Directory of PRC Military Personalities*.

Farther to the north, the 23rd GA's 67 Division (81134 Unit) in Mudanjiang and the 68 Division (81145 Unit) in Qiqihar may have been disbanded or transformed into brigade(s).⁷⁹⁵ The 2000 *Directory of PRC Military Personalities* notes that the 16th GA's 47 Division (81112 Unit) in Jilin City, Jilin has been transferred to the reserves.

The 40th GA's 120 Motorized Infantry Brigade (81222 Unit), Xingcheng, Liaoning was transferred to the PAP as the 8620 Unit. This PAP unit was probably involved in controlling civil unrest in the area in early 2000. The 39th GA's 117 Division also was transferred to the PAP as the 8610 Unit.

Like the 38th GA in the Beijing MR, the helicopter unit of the Shenyang MR is subordinate to a Group Army headquarters, the 39th GA. The presence of helicopter units in these GAs is an indication of the priority given these two GAs by the PLA leadership.

One source lists a second MR helicopter unit subordinate to the 23rd GA in Harbin.⁷⁹⁶ No other source confirms this location. However, the Harbin Aircraft Manufacturing Corporation is the producer of the Z-9, so the presence of helicopters in that city would not be unusual.

16GA (81021 Unit), Changchun, Jilin

32 Division (81123 Unit), Tonghua, Jilin
 46 Motorized Infantry Division/Brigade (81101 Unit), Changchun, Jilin
 4 Armored Division (81389 Unit), Shanchengzhen, Jilin
 Artillery Division (81312 Unit), Yanbian, Jilin
 AAA Division (81025 Unit), Changchun, Jilin
 Anti-Tank Missile Brigade (81829 Unit), Baicheng, Jilin

23GA (81032 Unit), Harbin, Heilongjiang

69 Motorized Infantry Division/Brigade (81156 Unit), Harbin, Heilongjiang
 UI Motorized Infantry Brigade
 Armored Brigade (81413 Unit), Daqing, Heilongjiang
 Artillery Brigade (81034 Unit), Jiaohe, Jilin
 AAA Brigade (81036 Unit), Jiamusi, Heilongjiang

39GA Mechanized (81043 Unit), Liaoyang, Liaoning

115 Mechanized Infantry Division (81167 Unit), Gaixian, Liaoning
 116 Mechanized Infantry Division (81178 Unit), Haicheng, Liaoning
 190 Mechanized Infantry Division (81233 Unit) (resubordinated from 64GA)
 3 Armored Division (81378 Unit), Siping, Jilin
 Artillery Brigade (81301 Unit), Liaoyang, Liaoning

⁷⁹⁵ The 2000 *Directory of PRC Personalities* does not include either the 67 or 68 Divisions.

⁷⁹⁶ See <http://cqch.com.cn/zgjs/jtj.htm>.

AAA Brigade (81367 Unit)
Helicopter Air Group (81053 Unit)

40GA (81054 Unit), Jinzhou, Liaoning

118 Motorized Infantry Brigade (81200 Unit)
119 Motorized Infantry Brigade (81211 Unit), Chifeng Neimenggu
8 Armored Brigade (81400 Unit), Fuxin, Liaoning
Artillery Brigade (81323 Unit), Jinzhou, Liaoning
AAA Brigade (81058 Unit), Jinzhou, Liaoning

Units Subordinate to MR

191 Motorized Infantry Brigade (81242 Unit), Dandong, Liaoning MD
UI Motorized Infantry Brigade, Liaoning MD (probably a former 64th GA unit)
ECM Regiment (81865 Unit)
Special Operations Dadui
Psychological Warfare Unit

INSIGHTS GAINED FROM THE OCTOBER 1ST PARADE

The PLA has a vast inventory of equipment. It also has a wide variety of weapon types, many with several variations and modifications, deployed to the forces. For example, *The Military Balance 1999-2000* lists a total of "some 8,300" main battle tanks and identifies five separate types (some with variants) of tanks in the PLA: Type 59-I/II, Type 69 I/II, Type 69 III, Type 80, and Type 85 IIM.⁷⁹⁷ An important implication of the number of different weapons in the PLA inventory is the strain it puts on the logistics system to keep the various types of equipment operational.

Even simple estimates of the number of types of weapons within a category and gross numbers of weapons in service differ from source to source. These estimates vary because it is often difficult to determine when a variant/modification of an existing system is considered a "new" vehicle type, when new systems enter the force, and when older systems are retired. Further complicating the issue are the numerous different designations given to the same piece of equipment, which can vary among Chinese sources as well as Western sources. Compounded by the lack of authoritative information from the Chinese government, these factors result in confusion and over-counting or under-counting of weapons actually in the PLA inventory. To illustrate these problems, the three sources below identify the following numbers of different types of equipment within these categories.

⁷⁹⁷ *The Military Balance 2000-2001* lists a total of 7,060 tanks of six types (with slightly different designations from the previous year). For comparison in the US Army, *The Military Balance 1999-2000* (p. 21) lists "some 7,684" main battle tanks, of two types : 40 M-60A3 and 7,644 M-1 including M-1A1 and M1A2.

Weapon Type	Military Balance	Jane's	Federation of American Scientists
Main Battle Tank	5	7	6
Light Tank	2	2	2
Armored Personnel Carrier/Infantry Fighting Vehicle	7	12	6
Towed Artillery	12	15	12
Self-propelled Artillery	5	6	9
MRL	7	10	12
AAA	8	11	12

Sources: *The Military Balance, 1999-2000*, p. 186; Robert Karniol, "Modernising PLA Ground Forces," conference paper presented at "China's Military Modernisation: Strategic & Regional Implications" sponsored by Jane's Information Group, Washington, DC, May 4-5, 2000; Federation of American Scientists website <http://www.fas.org/nuke/guide/china/agency/pla-inventory.htm>

The military parade held in Beijing on October 1, 1999 celebrating the 50th anniversary of the founding of the PRC and its accompanying media coverage provided an insight into some of the weaponry currently deployed in the force. However, only a small number of the different types of equipment actually in the PLA were seen in the parade. Most of the weapons on display were relatively new, though some have been in the inventory for nearly two decades.

Some important equipment did not take part in the parade. For example, only equipment manufactured in China drove down Changan Jie in Beijing. Equipment purchased from Russia, such as the SA-15 surface-to-air missile systems or Mi-17 helicopters, was not on display.⁷⁹⁸ Certain types of Chinese weaponry, such as the WS-1 320mm MRL, WM-80 273mm MRL, Type 90 122mm MRL, and the Type 90 APC, were not included in the parade forces. This could indicate that these weapons, while advertised for foreign sale, have not been introduced into operational PLA units.

It is nearly impossible using publicly available sources to identify in detail which units are equipped with what specific pieces of equipment. However, in a few cases, through the descriptions in the Chinese media of the units participating in the parade, it is

⁷⁹⁸ Su-27s purchased from Russia assigned to the PLA Air Force were part of the parade ceremonies.

possible to discern what type of weapons a few specific units have and make educated guesses about a few others.

A total of 16 unit sets of ground force equipment plus five flights of helicopters took part in the parade. The units were identified by vehicle markings starting with an "A" followed by three numerals, from 001 to 018, for the first unit, "B" for the second, "C" for the third formation, and so on. Each unit was arrayed in a square of four rows (ranks) and four columns, with two vehicles in the lead, for a total of 18 vehicles per formation.

Type 80 Tank. The first formation (A0XX)⁷⁹⁹ was made up of Type 80/Type 88B tanks from "a certain armored regiment under the command of the Beijing Military Region."⁸⁰⁰ The two tank commanders for this formation, deputy regimental commander Jin Jiulong and battalion commander Zhang Wangbao, as military cadets were drivers in the last military paraded of 1984.⁸⁰¹ In the following 15 years, they have risen to their current ranks (probably major or lieutenant colonel) and duty positions. This unit is probably from the 1st Armored Division, stationed east of Beijing.

The Military Balance 1999-2000 lists 500 Type 80 tanks in the PLA inventory. This number may be a reasonable estimate. It would indicate the presence of approximately five regiments of Type 80s deployed to the forces. Each regiment is probably composed of three battalions of about 31 tanks each. Each battalion has three companies consisting of ten tanks each, with three tanks per platoon and one command tank for the company commander.⁸⁰² An armored regiment probably also has a self-propelled artillery battalion, a self-propelled or towed AAA battery, and possibly a mechanized infantry battalion or company and some engineer support.

Type 85 II Tank. The second formation (B0XX) was composed of Type 85 II/Type 88C tanks. They were identified as the "Hero Tank Battalion" subordinate to an armored division in the Jinan MR.⁸⁰³ These are relatively new additions to the PLA inventory, with the first tanks probably entering units in the mid-1990s.

⁷⁹⁹ For the parade, each vehicle in each 18-vehicle formation was marked with a letter (A through P for ground units) followed by three numbers from 001 to 018. The shorthand A00X-P00X is used in the text to assist identifying the units and equipment seen in the parade.

⁸⁰⁰ "Backgrounder on National Day Celebrations," *Zhongguo Xinwen She* in Chinese, 1 October 1999, in FBIS-CHI-1999-1002.

⁸⁰¹ *Keji zhoukan* [Science and Technology Weekly], Beijing: Science and Technology Weekly Press, p. 10.

⁸⁰² *Zhihuiyuan Junshi Zhishi Shouci* [Commander's Military Knowledge Handbook], Beijing: Academy of Military Science Press, 1985, p. 239, has several diagrams that indicate a three-tank and three-APC structure per platoon. Soviet organizational experience and tactics greatly influenced Chinese TO&E decisions.

⁸⁰³ *Keji zhoukan*, p. 12.

The Military Balance 1999-2000. Lists 800 Type 85 IIM tanks in the PLA inventory, which would equate to about eight regiments. The presence of the tank in the Jinan MR indicates that it has been deployed fairly extensively into the forces. However, the total number 800 may be somewhat high a figure for a tank that has entered the PLA inventory so recently.⁸⁰⁴

A version of this tank, the Type 85 IAP, fitted with a 125mm main gun and automatic loader was sold to Pakistan in the early 1990s and was also licensed for production in Pakistan at the Heavy Defense Industries plant at Taxila.⁸⁰⁵

Type 98 Tank. The third formation (COXX) was noted to be a "mixed formation composed of new-type main battle tanks from a certain armored regiment...[in] the Beijing MR...[which] is involved in receiving foreign dignitaries."⁸⁰⁶ This description indicates the unit is an element of the 6th Armored Division.

The formation was composed of ten Type 98 tanks in the command positions and first two rows, followed by two rows of Type 85 II/Type 88C (eight tanks). The presence of a mixed formation consisting of ten Type 98 tanks indicates a ten-tank company structure, but more importantly is a strong indication that the ten tanks on parade constitute the entire number of Type 98 tanks in active PLA units. Were there more than ten tanks available in the unit, then certainly they all would have been in the parade.

This Type 98-equipped company is indicative of the first experimental deployment of this tank to the forces, probably pushed down to the unit specifically for the October 1st parade. It is possible that additional small numbers Type 98 tank companies have been deployed to other units, but the total number of Type 98s in the PLA's active inventory is likely to be extremely limited, much less, for example, than the number of Type 85 II/Type 88C in the inventory.

The Type 98 appears to be of a similar design and vintage as the Russian T-72. It is also known as the WZ-123 and is a variation of what previously was called the Type 90 II or Type 90 IIM, which is being jointly developed with Pakistan. The tank is easily identified by the location of the driver in the center of the vehicle behind a prominent "V" on the glacis plate. Unlike all other Chinese tanks, it has a three-man crew. The fourth man is eliminated because of the automatic loader for the 125mm main gun. It is equipped with a computerized fire control system; the tank commander and gunner each have a stabilized independent sight. The Type 98 weighs approximately 50 tons, is powered by a 1200 horsepower diesel engine, and can be fitted with reactive armor. Significantly, it appears to be equipped with both a laser warning receiver and laser self-

⁸⁰⁴ *The Military Balance 2000-2001* revises downward the number of Type 88C to 400.

⁸⁰⁵ "Pakistan Fields Type 85 MBTs," *Jane's Intelligence Review Pointer*, December 1994.

⁸⁰⁶ "Backgrounder on National Day Celebrations." From hereafter, all references to unit subordination for the PLA ground force weapons on display are taken from this source.

defense weapon, based on a "laser interference device" known as the ZM-87. The prototype for the Type 98 is called the Type 96.⁸⁰⁷

The reduction of crew size from four to three will result in personnel manning, training, and maintenance changes for the unit. Obviously, a Type 98 unit will be smaller than other tank units and will result in administrative changes for the unit. The duties of crew members and the way the crew trains will be different for this tank than for older tanks in the inventory. Because of its high-technology weapons systems, it will also be more maintenance intensive than other PLA tanks. Its larger engine will probably require more fuel and impose new requirements for the unit's supply system.

WZ-501 Infantry Fighting Vehicle. The fourth formation (D0XX) was composed of WZ-501 Infantry Fighting Vehicles from a "certain mechanized infantry regiment" in the Beijing MR.⁸⁰⁸ The WZ-501 is a copy of the Soviet BMP. This weapons system has been deployed to the PLA for some years now. *The Military Balance 1999-2000* has no listing of the number deployed, while Jane's says that 2000 are in the forces.⁸⁰⁹ This number would appear to be high – over 20 mechanized infantry regiments. Like tank units, mechanized infantry units appear to be organized based on three-vehicle platoons, ten-vehicle companies, 31 +/- vehicle battalions, and 90+ vehicle regiments.

Type 85 Armored Personnel Carrier. The fifth formation (E0XX) was composed of Type 85 Armored Personnel Carriers also from "certain mechanized infantry regiment" in the Beijing MR. This vehicle is also known as the WZ 534 and is a relatively new weapons system. It is uncertain how many are deployed to PLA units. The Type 85 would likely be a logical replacement for the older Type 63/YW 531C series of APCs that were the most widely deployed APC in the force.

Type 92 Wheeled Armored Personnel Carrier. The sixth formation (F0XX) was composed of Type 92/WZ 551 Wheeled Armored Personnel Carriers from the Jinan MR. It is not known how many of this relatively new six-wheeled APC have been deployed to the forces. Another six-wheeled APC, the WZ 553, has been deployed to the Hong Kong Garrison, but was not part of the October 1st parade.

HJ-9C Wheeled Anti-Tank Missile Vehicle⁸¹⁰ The seventh formation (G0XX) consisted of HJ-9C Wheeled Anti-Tank Missile Vehicles subordinate to "a certain anti-tank missile regiment" in the Nanjing MR. Since the unit is identified as a "regiment," it would likely be subordinate to an artillery division. One artillery division has been

⁸⁰⁷ James M. Warford, "The Chinese Type 98 Main Battle Tank: A New Beast from the East," *Armor Magazine*, May-June 2000, pp. 12-14; and Christopher F. Foss, "China's PLA fields Type 98 MBT," *Jane's Defense Weekly*, p. 2.

⁸⁰⁸ The "Backgrounder on National Day Celebrations" also contained details from the campaign history of this unit. It may be possible to use this description to identify this unit through comparison with published unit histories.

⁸⁰⁹ Karniol, "Modernising PLA Ground Forces."

⁸¹⁰ This designator was identified to the author by a US government official.

identified in the Nanjing MR, and it is subordinate to the 1st GA in Huzhou, Zhejiang province.

The HJ-9C is a new weapon for the PLA and little is known publicly about it. Neither Jane's Robert Karniol nor *The Military Balance* includes it.

Type 89 SP 122mm Howitzer. The eighth formation (H0XX) was composed of Type 89 SP 122mm Howitzers. These guns were said to be part of "a certain armored regiment" of the Beijing MR. This linkage would indicate that an armored regiment, consisting of three armored (tank) battalions, would also have a self-propelled artillery battalion as an organic unit. It is likely that the battalion would consist of 18 guns, as seen in the parade.

Type 89 SP 120mm Anti-Tank Gun. The ninth formation (I0XX) was composed of Type 89 SP 120mm Anti-Tank Guns. They were identified to part of "a certain group army's artillery brigade under the Beijing MR," i.e., the 6th Artillery Brigade of the 38th GA.

This weapon was introduced into PLA units in the mid-1990s and is probably still deployed in relatively limited numbers.

Type 83 SP 152mm Howitzer. The tenth formation (J0XX) was composed of Type 83 SP 152mm Howitzers. The unit was said to be from "a certain armored division under the command of the Beijing MR," whose predecessor unit was "the first tank unit of the Chinese PLA." This description would appear to fit the 1st Armored Division.

This weapon has been in the PLA inventory for nearly two decades, though perhaps in relatively limited numbers. Jane's holds 83 Type 83s in the inventory,⁸¹¹ which would amount to a little over four 18-gun battalions. Intuitively, this number seems rather small for the number of armored divisions in the PLA. However, without a doubt, towed artillery (122mm, 152mm, and 130mm) vastly outnumbers the self-propelled weapons in the force, including the armored forces.

Type 89 SP 122mm MRL. The eleventh formation (K0XX) was composed of Type 89 SP 122mm MRLs. This unit was said to be subordinate to "the artillery regiment of a certain mechanized infantry division under command of the Beijing MR." A likely candidate meeting this description is the 112th Mechanized Infantry Division, which is stationed just outside of the southern edge of the Beijing municipality at Xincheng.

The 122mm MRL system is based on the Soviet BM-21 122mm MRL and is widely deployed to PLA, in both wheeled and tracked versions, in division artillery regiments and artillery divisions and brigades. The Type 89 is an upgrade in that it has a second load of ammunition mounted on the vehicle for rapid reload.

PGZ-95⁸¹² SP Quad 25mm AA Gun/SAM System. The twelfth formation (L0XX) was composed of PGZ-95 SP Quad 25mm AA Gun/SAM System. This unit was identified as "formed by a certain armored regiment under the command of the Jinan MR."

⁸¹¹ Karniol, "Modernising PLA Ground Forces." Other sources do not have a specific number of guns deployed into the force.

⁸¹² This designator was identified to the author by a US government official.

This weapons system is newly developed by the Chinese defense industries and deployed to the force. The parade displayed four rows (16 vehicles) of the 25mm Gun/SAM system, each with a small fire control radar, led by two command vehicles without the 25mm gun/SAM system, but easily identified by the much larger target acquisition radar. Each gun/SAM system consists of four 25mm AA guns and four short-range surface-to-air missiles (possibly the QW-1 Vanguard developed in the early-mid 1990s) mounted above the guns. The combination gun/SAM system is similar in concept to that found on the Russian SA-15/Tor-M1, 15 of which have been purchased by the PLA with another 20 on order.⁸¹³

This weapon system is designed to be employed in a unit composed of a command vehicle for command, control, and target acquisition and probably four gun/SAM systems. The terminology used in the Chinese media description of the formation, "formed by a certain armored regiment," implies that the weapon may be organic to armored regiments to provide front line short-range air defense for maneuver units. Former Soviet tank regiments had organic self-propelled AAA weapons and later SAM systems. For example, Soviet tank regiments had four to six ZSU 23/4 or ZSU-57-2 in an organic air defense element. Later the ZSU-23/4s were joined by four SA-9 SAMs. If the PLA follows the Soviet example, it is possible that an air defense battery of one command vehicle and four gun/SAM systems could be assigned to armored regiments.

It is also possible that all the command and gun/SAM systems are maintained in an air defense regiment subordinate to division headquarters and units are temporarily assigned to maneuver elements as needed (this is done through the process known as "task organization"). Opportunities for combined arms training and smooth integration in regimental planning and operations would be greater if the smaller air defense units are organic to maneuver regiments. However, maintenance and support may be easier all systems are in a single regiment under division control. Division headquarters would also have greater control of these relatively scarce assets if all are subordinate to a single regimental headquarters. It is likely that early deployments of this system and the SA-15 to the PLA will be used to experiment with these different methods of command and organization.

It is not known how many PGZ-95 have been deployed to PLA units. *Jane's Defense Weekly* reports that China is negotiating with Russia for the licensed production of "160 [SA-15] launchers which would be used to equip 10 regiments."⁸¹⁴ This description implies that each regiment would consist of 16 launchers and that, if deployed in infantry or armored units, the regiment would be subordinate to division headquarters.

In the coming years it will be interesting to watch if the PLA decides to equip its units with both the PGZ-95 and the SA-15 or if one of the two systems is selected over

⁸¹³ "China in talks with Russia to produce Tor-M1 SAM," *Jane's Defense Weekly*, 19 July 2000, p. 17.

⁸¹⁴ Ibid. The article also states that two groups of Chinese have received training on the SA-15 in Russia.

the other. Moreover, the way it is deployed to the forces, i.e., whether assigned in small units directly to maneuver regiments or maintained in larger quantities under division control, may also be an indicator of the progress of combined arms and maintenance/support operations in the PLA.

Type 81 Wheeled 122mm MRL. The thirteenth formation (M0XX) was composed of Type 81 Wheeled 122mm MRLs. The formation was identified as belonging to an artillery regiment in the Beijing MR. This older weapon is another variation of the 122mm MRL system that is found throughout ground forces units subordinate to divisional artillery regiments.

PLL-01 155mm Towed Gun-Howitzer. The fourteenth formation (N0XX) was composed of 155mm Towed Gun-Howitzers. This unit belongs also to an artillery regiment in the Beijing MR. The gun on display may be the 155mm WAC-21/WA-021 or a variant of that weapon. According to Jane's, only 36 WAC-21/WA-021s have entered the PLA's inventory.⁸¹⁵

Twin 35mm Towed AAA. The fifteenth formation (O0XX) was composed of towed Twin 35mm AAA guns. This formation was formed by "a certain Group Army under the Beijing MR." The formation was led by two jeeps, followed by four radars, and 12 towed guns.

Currently towed 37mm AAA gun units are found in maneuver regiments of the PLA. The wording describing the subordination of this formation implies that it could have been formed of sub-elements of a number of units within a Group Army. For example, if six AAA guns are assigned to an infantry or tank regiment, it would take the AAA assets of two regiments to make up an 12-gun formation. In any case, this new weapon provides short-range, low-level air defense for tactical PLA formations.

HQ-7/FM-80 Wheeled SAM. The sixteenth formation (P0XX) was composed of the HQ-7/FM-80 Wheeled SAM system. This formation was composed "by an antiaircraft brigade of a certain group army under the Beijing MR and a certain missile regiment of the Air Force." The formation was led by two jeeps followed by four self-propelled radar vehicles, four self-propelled launcher vehicles, and eight towed launchers. The fact that it was necessary to go to both the army and the air force to gather together 18 vehicles for the parade implies that this weapon is still relatively scarce in the PLA forces.

The FM-80 is a Chinese-manufactured derivative of the French Crotale SAM. Its naval version was also on display in the parade.

Z-9/WZ-9 Helicopters. Five formations of five Z-9/WZ-9 helicopters overflew the parade route. According to media reports, the helicopter echelon consisted of "10 helicopters and 15 attacking helicopters."⁸¹⁶

⁸¹⁵ Karniol, "Modernising PLA Ground Forces."

⁸¹⁶ Xu Zuzhi, "Grand National Day Ceremony News Background," *Zhongguo xinwen she* in Chinese, 1 October 1999, in FBIS-CHI-1999-1003.

It is likely that the WZ-9 armed helicopters are deployed to units with other unarmed helicopters that provide command and control and reconnaissance for the attack aircraft. However, the October 1st parade did not provide any other indications of the composition of helicopter units within the PLA ground forces.

CONCLUDING REMARKS

PLA ground forces have been engaged in a massive reduction and reorganization, as well as the introduction of new equipment and retirement of old, for over three years now. These structural reforms are taking place at the same time that:

- The PLA is attempting to attract more educated college graduates to become officers;
- The conscription time for ground force soldiers has been reduced from three to two years;
- The force is attempting to build an NCO corps;
- PLA doctrine is changing to fighting "Local War under Modern High Technology Conditions";
- The professional educational system is being revamped;
- PAP and reserve forces are growing;
- PLA units were forced to give up their commercial enterprises; and
- The Taiwan contingency has been elevated to primary importance in the PLA's planning efforts.

Any one of these changes would be disruptive to a military force. The combination of all them occurring simultaneously is bound to compound the effects of any single reform and have unexpected consequences. It is likely that many changes that looked good on paper will be modified over the years as they are implemented by the forces in the field. The past few years must have been a terribly challenging time for a conservative organization like the PLA.

On the surface, the PLA appears to have established the parameters for the type of force it would like to become: a smaller, more rapidly deployable, combined arms force equipped with weapons that increase the range from which it can strike the enemy, while retaining its traditions of stealth, deception, and flexibility. Many of the changes and new equipment described above move them in that direction. However, many questions remain. For example, will the downsizing of divisions to brigades actually improve their ability to deploy rapidly? With the creation of smaller units, are higher headquarters improving the logistics capabilities necessary to support these smaller units?

Little is known publicly of PLA improvements in their tactical communications and reconnaissance/intelligence capabilities and the tactical support units required to aid the ground forces' mobility, survivability, and sustainability on the modern battlefield. For example, does the PLA have tactical bridging equipment that can support the heavier weights of its new tanks? These units often get less attention, and less funding, than their combat arms brethren. But they provide "combat multipliers" that allow other weapons systems to be used to their maximum capabilities.

The totality of these developments must be monitored closely as PLA modernization continues. No one system is going to transform the PLA magically into a modern force. Rather, modernization will result from a series of slow, cumulative efforts only some of which will be visible from equipment in the inventory. The way the ground forces officers, NCOs, and enlisted troops think about modern operations, their morale, level of training, and confidence all will be as important for successful modernization as which generation of tank or missile is deployed to the force.

PLA ground forces have not been engaged in combat against a foreign enemy since 1979. Though they have studied the experiences of modern combat of foreign armies, they have not themselves had experience of planning for or conducting mid- or high-intensity modern operations, nor have they felt the impact of modern forces arrayed against them. Theoretically they understand the importance of integrating weapons into systems that increase the effectiveness of each weapon if only used by itself. Practically, the integration of numerous new systems into an effective whole is not achieved quickly. Operational techniques must be attempted, practiced, and modified to meet realistic conditions in an unending iterative process. Mere acquisition of modern equipment does not guarantee a modern force.

9. PLA AIR FORCE ORGANIZATION

By Ken Allen⁸¹⁷

*The Chinese People's Liberation Army Air Force has completed a major restructuring of its operational forces that has seen the number of air divisions cut by nearly 25 percent over the past three years. This is a result of force reductions that began in 1985 and the PLAAF's immediate need to retire obsolete aircraft.*⁸¹⁸

The purpose of this paper is to examine changes in the People's Liberation Army Air Force's (PLAAF) organizational structure since 1949, including changes in four areas: leadership; strategy, doctrine, and missions; administrative structure; and operational force structure. This paper will not address changes in operational capabilities as a result of weapons systems modernization.⁸¹⁹

Although the PLAAF was not formally established until November 1949, the Chinese Communist Party (CCP) became involved in aviation as early as the 1920s.⁸²⁰ The concept for

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⁸¹⁸ Jane's Defence Weekly, 14 June 2000.

⁸¹⁹ For information on the PLAAF's modernization and equipment, see Richard D. Fisher, Jr., "Foreign Arms Acquisition and PLA Modernization," in James R. Lilley and David Shambaugh, eds., *China's Military Faces the Future*, Armonk NY: M.E. Sharpe, 1999; and Kenneth W. Allen, "PLA Air Force Operations and Modernization," in Susan M. Puska, ed., *People's Liberation Army After Next*, Carlisle, PA: U.S. Army War College, Strategic Studies Institute, August 2000.

⁸²⁰ The information on the PLAAF's early history comes from Kenneth W. Allen, *People's Republic of China's Liberation Army Air Force*, Washington D.C., Defense Intelligence

the PLAAF did not actually take shape, however, until the early 1940s at Yanan. Soviet involvement during the early 1950s in providing China with new aircraft and in helping organize the PLAAF's flying schools and operational units greatly influenced the PLAAF's organizational structure. On the positive side, the Korean War, Vietnam War, and the standoff with the Soviet Union in the late 1960s acted as catalysts to expand the Air Force's organizational structure. On the negative side, the Cultural Revolution severely impacted the PLAAF's equipment acquisition, training and operational readiness.

By 1971 the PLAAF had created fifty air divisions and thirteen air corps, and had simplified its administrative command structure from a high of eleven first-level departments in 1955 to just three.⁸²¹ Recovery from the Cultural Revolution did not begin until the 1980s, especially following the People's Liberation Army (PLA) consolidation of its military regions in 1985 and formulation of the PLAAF's five-year plan (1986-1990).⁸²² Although the PLAAF's administrative and operational structure remained fairly static during the 1990s, the Air Force has sought to adjust its doctrine, tactics, logistics support, and training due to a thirty-five percent reduction in the number of air divisions, the introduction of new weapons systems, and the emphasis on mobile operations.

Today, the administrative structure of the PLAAF consists of four major departments (headquarters, political, logistics, and equipment) that reflect the organizational structure of the four general departments (general staff, political, logistics, and armament). This structure is mirrored through the administrative and operational chain of command from Headquarters Air Force (HqAF), through the seven military region air forces (MRAF), five air corps, and six bases, all the way down to the lowest operational units. Besides the administrative elements, the core of the PLAAF consists of five branches, plus various support elements, schools, and research institutes.

Several trends in the Air Force's leadership since the mid-1980s have affected the PLAAF's status within the PLA. Prior to the early 1980s, the PLAAF's senior leadership was dominated by ground force officers, who viewed airpower as long range artillery to support the Army. As a result, the PLAAF's strategy and doctrine was primarily ground force oriented. Beginning in the mid-1980s, however, most of the PLAAF leaders had come up from within the

Agency, 1991, Section 2; Yao Jun, ed., *Zhongguo hangkong shi* [A History of China's Aviation], Zhengzhou: Dajia Publishers, September 1998; *Dangdai Zhongguo kongjun* [China Today: Air Force], Beijing: China Social Sciences Press, 1989; and from Lin Hu, editor, *Kongjun shi* [History of the Air Force], Beijing: PLA Press, PLAAF Headquarters Education and Research Office, November 1989.

⁸²¹ Yao Jun, p. 376.

⁸²² Lin Hu, pp. 218-221.

air force ranks. Another trend involves age and experience. Since ranks were re-instituted in 1988, the average age of the PLAAF's leaders at the three general officer ranks has declined by about 3-5 years. In addition, whereas almost every PLAAF leader in the 1980s had fought in the Korean War, they had all retired by the mid-1990s. These changes, along with the acquisition of various weapon systems, led to a shift during the 1990s from a purely defensive posture toward having a simultaneous offensive and defensive capability.

THE UNEVEN ROAD TO MODERNIZATION

The Early Years

In September 1924, during the first Chinese Nationalist Party (Kuomintang/KMT) and CCP united front period, Sun Yat-sen's Guangzhou Revolutionary Government established an Aviation Bureau and a military flying school in Guangzhou, where two classes (50 people) received a year of training. Following their graduation, eighteen cadets (nine KMT and nine CCP) were sent to the Soviet Union for two years of advanced flight training.⁸²³ Two of the key CCP members, Chang Qiankun and Wang Bi, helped shape the PLAAF's future.

Chang and Wang both served in the Soviet Air Force until September 1938, when they were sent to Dihua (Wulumuqi) as military instructors. In 1940, they were transferred to Yanan, where they helped found the PLAAF. Over the next decade, Chang served in several positions, including director of the Central Military Commission's (CMC) Aviation Bureau and PLAAF deputy commander, while Wang served primarily in political commissar and aircraft maintenance positions, but retired as a PLAAF deputy commander.⁸²⁴

⁸²³ The Soviet Union helped the CCP and the KMT establish the same organizational structure during the 1920s. In response to Japanese actions in China, beginning with Japan's invasion of Manchuria in 1931, the Soviets supported the Nationalists by providing arms and advisors. From late 1937 until Germany attacked the Soviet Union in June 1941, Stalin provided about \$300 million in credits to Chiang Kai-shek's regime to finance Soviet aid, including hundreds of planes, pilots to fly them, and instructors to train Chinese pilots. Soviet advisors were also attached to Nationalist army units. Schwartz, Harry, *Tsars, Mandarins, and Commissars: A History of Chinese-Russian Relations*, New York: Anchor Books, 1973, pp. 133-134.

⁸²⁴ The term Central Military Commission or CMC is actually a misnomer. The Chinese term is *Zhongguo gongchandang zhongyang junshi weiyuanhui*, which literally means Military Commission of the Central Committee of the Chinese Communist Party. The Chinese term is most commonly shortened to *zhongyang junwei* or *junwei*. Properly speaking, *zhongyang* refers to the Central Committee. While the Chinese term has not changed since its creation, the

In January 1941, the CMC decided to create an Air Force Engineering School, even though the CCP had no aircraft or airfields. The school, known as the 18th Group Army Engineering School, was formally established in March 1941 and was charged with teaching basic aviation theory and aviation armament. Wang Bi was the first commandant, and Chang Qiankun was chief instructor.

In May 1944 at Yanan, the CMC established an Aviation Section (*hangkongzu*) that was responsible for all aviation work under the 18th Group Army's (*jituanjun*) General Staff Department. Wang and Chang were the first director and deputy director, respectively.

In September 1945, the Aviation Section sent a 30-member team from Yanan to northeast China to begin preparations for setting up an aviation school. In May 1946, the Northeast Old Aviation School (*dongbei lao hangxiao*) was established in Mudanjiang, Jilin Province. The first class began in July with four basic trainers and a few type-99 advanced trainers. Many of the initial instructors and ground support personnel were Japanese Air Force members who remained in China after the surrender in 1945. By July 1949, the school had trained 560 people, including 125 pilots and 435 ground support personnel. In late 1949, the CMC approved a total of seven flying schools and the Soviet Union agreed to sell China 435 aircraft and to provide advisors for the schools. By then, the Chinese had also acquired 115 KMT aircraft.

In March 1949, the CMC established the CMC Aviation Bureau (*hangkongju*), with Chang as the director and Wang as the political commissar. On 11 November 1949, the CMC abolished the Aviation Bureau and formally established the PLAAF, using elements of the Fourth Field Army's 14th *bingtuan* as the core.⁸²⁵ Liu Yalou, who at the time was the 14th *bingtuan* commander, became the first PLAAF commander, and Xiao Hua, who had both command and political commissar experience, became the first political commissar. Chang Qiankun was appointed as a deputy commander and director of the Training Department, and Wang Bi was appointed as the deputy political commissar and director of the Aeronautical Engineering Department.

The PLAAF created its first flying squadron in July 1949 at Beijing Nanyuan, consisting of six P-51s, two Mosquito bombers, and two PT-19 trainers. The first aviation unit established as part of the PLAAF was designated the 4th Combined Brigade (*hunchenglu*) and consisted of two fighter regiments, one bomber regiment, and one attack regiment. In August 1950, the PLAAF wrote its first development plan for the years 1950 to 1953. The plan called for training 25,400 technical troops, establishing about 100 aviation regiments, repairing over 100 airfields, setting up eleven aircraft repair factories, and increasing the size of the PLAAF to 290,000 personnel. For the most part, these goals were reached by the end of 1953.

English translation has changed over the years. In the 1960s and 1970s, the commission was commonly referred to as the Military Affairs Commission (MAC).

⁸²⁵ See introductory chapter to this book for discussion of the *bingtuan* organization.

The bulk of the forces were concentrated in the northeast and in major cities such as Beijing, Shanghai, Nanjing, and Tianjin to protect them from Nationalist Air Force air raids. It was not until after the 1958 Taiwan Strait Crisis, however, that the PLAAF moved into Fujian and Guangdong Provinces. The PLAAF moved forces into the western regions following the "liberation" of Tibet and the 1962 border war with India. More units were deployed to the southern region during the Vietnam War and near the Soviet border after 1969, so that by the mid-1970s, the PLAAF had a permanent presence throughout China. As the PLAAF created new units, it also expanded its operational areas of command and control and reorganized its administrative structure to deal with these changes.

The Cultural Revolution

Although the PLAAF matured rapidly during its first fifteen years, it has spent the past twenty-five years recovering from the disastrous effects of the Cultural Revolution. By 1959, the PLAAF had seventeen numbered aviation schools – not all of which were for pilot training – plus several other schools.⁸²⁶ However, everything changed during the Cultural Revolution when

⁸²⁶ In 1949, the PLAAF established seven Aviation Schools: 1st in Harbin, 2nd, in Changchun, 3rd in Jinzhou, 4th in Shenyang, 5th in Jinan, 6th in Beijing, and 7th in Mudanjiang. In 1951 the 8th aviation school was formed in Shenyang for fighters; In 1952 the 9th in Changchun and 10th in Taiyuan for maintenance. In 1953 the 11th in Huxian, Shaanxi, and 12th in Linfen, Shanxi for fighters. In 1956 the 13th in Chengdu for fighters, but was abolished in 1969. In 1956 the 14th in Xinjin, Sichuan, for civil aircraft ground crew training (later turned over to civil aviation). In 1958 the 15th Aviation School (AKA Special Weapons School) was established in Baoding with responsibility for training all services on surface-to-surface, surface-to-air, and shore-to-ship missile maintenance. This school became the SAM school in 1986. Also in 1958, the 16th Aviation School was established in Huxian, Shaanxi, to train navigators. In 1986 this school became the Navigation Academy. In 1960 the 17th Aviation School was established in Jilin. In 1965, the PLAAF had the following 29 academies and schools: PLAAF College; PLAAF Engineering College; Four Advanced Technical Schools; Ten Aircrew Aviation Schools; Five Ground Crew Aviation Schools; Political School; Logistics School; AAA School; Radar School; Communications School; Health School; and Two Aviation Preparatory Schools. In 1967, the 8th, 9th, 10th, and 13th Aviation Schools were renamed the 1st, 2nd, 3rd, and 4th Aviation Maintenance Schools. The 1st and 2nd Schools later became the 1st and 2nd Maintenance Technical Training Schools. Due to requirements for increasing number of flying hours, the 8th Aviation School was re-established in 1967 in Hami, Xinjiang for fighters. In 1967, the 15th Aviation School was renamed the 9th Aviation School and dedicated to fighters. The 10th was re-established in 1968 in Qiqihar, Inner Mongolia for fighters. In February 1969, twelve PLAAF schools were closed (Command College, Er Gao Zhuan, AAA, political, 3rd and 4th maintenance,

two opposing ideas competed simultaneously. On one hand, Lin Biao and the leftists closed down non-pilot training schools, canceled all theory classes for pilots, and reduced the flight training time. On the other hand, the 1960s war in Vietnam, plus Lin Biao's paranoia about China facing an imminent large war, led to an increase in flying hours at the flying schools.

In August 1966, all non-flying schools suspended classes. This situation lasted for nearly six years, halting virtually all non-flying and ground training.⁸²⁷ In many instances, military school compounds were occupied or destroyed as well as teaching materials, books, and equipment. Instructors, researchers, and staff were often scattered throughout China. In the worst cases, they were killed or died. The expected training goal for the thirteen non-flying schools during the Cultural Revolution years was 21,900 students, but only 5,650 graduated.⁸²⁸ In matters involving flight safety, education, training, strategy, and tactics, PLAAF historians claim the Cultural Revolution actually caused atrophy.⁸²⁹ For the PLAAF, the cessation of education was more complicated than it was for society as a whole. The problems resulting from the "stop classes, make revolution" activities were disruptive but did not pose the most harmful consequences.

The major problem was Lin Biao's advocacy of an imminent war doctrine. While pilot training in the flying academies, which previously took thirty months, was reduced to twelve

17th aviation, 1st and 2nd preparatory, communications, logistics, and medical schools). The 9th and 10th schools were abolished in 1985. In 1987, the 11th school was redesignated the PLAAF Flight Test and Training Center at Cangzhou, Hebei. In July 1986, the PLAAF made several changes, including changing the name of most of the Schools/*xuexiao* to Academies/*xueyuan*. The 26 academies and schools that existed in 1989 are as follows: AAA (Guilin, Guangxi); Command College (Beijing); Communications (Xian, Shaanxi), Dalian NCO; Engineering College (Xian, Shaanxi); Logistics (Xuzhou, Jiangsu); Medical (Jilin); SAM (Sanyuan, Shaanxi); Navigation (Huxian, Shaanxi); Political (Shanghai); Radar (Wuhan, Hubei); Weather (Nanjing, Jiangsu); 1st Maintenance Tech Training School (Xinyang, Henan); 2nd Maintenance Tech Training School (Changchun, Jilin); 1st Flying Basic School (Changchun, Jilin); 2nd Flying Basic School (Baoding, Hebei); 1st Flying Academy (Harbin, Heilongjiang); 2nd Flying Academy (Jiajiangxian, Sichuan); 3rd Flying Academy (Jinzhou, Liaoning); 4th Flying Academy (Shijiazhuang, Hebei); 5th Flying Academy (Wuweixian, Gansu); 6th Flying Academy (Zhuoxian, Hebei); 7th Flying Academy (Changchun, Jilin); 8th Flying Academy (Liushuquan, Xinjiang); 12th Flying Academy (Linfen, Shaanxi); 13th Academy (Bengbu, Anhui).

⁸²⁷ Kenneth W. Allen, Glenn Krumel, and Jonathan D. Pollack, *China's Air Force Enters the 21st Century*, Santa Monica: RAND, 1995, Chapter 4. Identified as Allen, Krumel, and Pollack.

⁸²⁸ *Dangdai Zhongguo Kongjun*, p. 298.

⁸²⁹ Allen, Krumel, and Pollack, Chapter 4.

months in 1967, the number of flying hours rose dramatically: 180,000 in 1966; 260,000 in 1968; 310,000 in 1970; and 400,000 in 1972.⁸³⁰ However, the training was so haphazard that by 1968 the achievement levels of graduates were so low they could not be used in the units where they were assigned. Once cadets arrived at their units, their flight training was reduced significantly. Average flying hours for PLAAF fighter pilots averaged 122 hours in 1964, 23 hours and 45 minute in 1968, and 55 hours in 1970.⁸³¹ Naval Aviation fighter and bomber pilots averaged 26 hours from 1965-1971, with a low of 12.5 hours in 1968. In addition, maintenance was so poor that by 1969 the PLAAF's "serious accident rate" (loss of aircraft and pilot) soared to 6.0 per 100,000 hours from 2.49 in 1964.⁸³² From 1969-1978, Naval Aviation had over seventy aircraft accidents that resulted in total loss of the aircraft and sixty-two pilot deaths. The serious accident rate in Naval Aviation was 11.2 per 100,000 hours.⁸³³ Besides lack of pilot training, the accident rate was due to shoddy aircraft production.⁸³⁴

This situation began to change in the early 1970s when schools were reopened and technical and theory training was reintroduced. Since then, the PLAAF's overall organizational structure has remained fairly constant. The number of air divisions reached a peak in 1971, but has declined appreciably over the past decade as a result of personnel cuts and retiring older

⁸³⁰ *Dangdai Zhongguo Kongjun*, p. 299. At the PLAAF's Second Aviation School, authorities claimed that the elimination of aviation theory courses between 1967 and June 1970 resulted in an increase of aircraft accidents at the school and operational bases. There were similar results in 1970, when some technical courses resumed for periods of only three to eight months. See *Zhongguo Renmin Jiefangjun Kongjun Dier Hangkong Xuexiao jianshi* [Brief History of the PLAAF Second Aviation School], Chengdu: Air Force Second Aviation School, August 1982.

⁸³¹ Yao Jun, p. 376.

⁸³² Allen, Krumel, and Pollack, Chapter 4. In 1984, the PLAAF's serious aircraft accident rate was 2.04. The three categories of aircraft accidents are (1) aircraft and pilot lost; (2) aircraft lost, pilot safe; and (3) aircraft damaged, pilot safe.

⁸³³ Yao Jun, p. 377. According to the May 1999 issue of *Air Force Magazine*, the US Air Force Class-A accident rate (loss of life, permanent total disability, destroyed aircraft, or more than \$1 million in property damage) average for the ten year period of 1989-1998 was 1.4 accidents per 100,000 flying hours.

⁸³⁴ The only successful Chinese design program during the 1960s was the A-5 ground attack aircraft, derived from the MiG-19. Initial design work on the A-5 began in 1958, and following many setbacks, the first flight was conducted at Nanchang in 1965. In November 1975, the Central Military Commission ordered all of the A-5s in the inventory to be returned to the factory for overhaul because of failures in manufacturing quality control. *Dangdai Zhongguode hangkong gongye*, p. 83.

aircraft. While different administrative departments have combined and split several times and new operational commands have appeared and been abolished, their basic responsibilities have not changed appreciably.

Fifteen Years of Change

Since the late 1980s, there have been several organizational changes that have affected the PLAAF's operational capabilities. In 1993, the PLAAF began reorganizing all of its command posts as bases to meet reduction-in-force requirements and to streamline the operational control of aircraft in critical areas.⁸³⁵ In 1998, the PLAAF reorganized its headquarters to match the PLA's newly-created General Armament Department. During this period, there has been a wholesale change in leaders, so that very few, if any, of the current generation of PLAAF leaders fought in the Korean War. Therefore, the new leaders bring a different set of experiences, including travel abroad, into their command positions. As part of the move toward fostering a stronger service identity, PLAAF officers are now allowed to wear Air Force uniforms rather than Army uniforms when they fill positions in the four general departments. Concerning organizational changes that have affected operational pilot training, the PLAAF created the Flight Test and Training Center (*kongjun feixing shiyan xunlian zhongxin*) in Cangzhou, Hebei Province, in February 1987.⁸³⁶ In addition, the PLAAF formed a Blue Force aggressor unit subordinate to this Center. The PLAAF also began expanding its training base in the Gobi Desert near Dingxin, Gansu Province, where multiple PLAAF units could practice the tactics developed at Cangzhou and tested in individual units throughout the force.⁸³⁷ These changes will be discussed in detail below.

LEADERSHIP

One of the fundamental questions today is where does the PLAAF fit in the overall PLA hierarchy in terms of clout, missions, responsibilities, and autonomy? In other words, is the PLAAF in charge of its own future? Although the PLAAF has been described as "an independent service"⁸³⁸ and has received some of the newest foreign weapon systems, there are indications that the PLAAF is still viewed as an extension of, and is controlled by, the Army. Just because the PLAAF has received a visible share of new equipment from the Russians does

⁸³⁵ Ibid., p. 147.

⁸³⁶ Allen, 1997, Section 20.

⁸³⁷ *Dangdai Zhongguo Kongjun*, p. 311.

⁸³⁸ Teng Lianfu and Jiang Fusheng, editors, *Kongjun zuozhan yanjiu* [Air Force Operations Research], Beijing: National Defense University Publishers, May 1990, p. 147. See also You Ji, *The Armed Forces of China*, Australia, Allen & Unwin, 1999, p. 118.

not necessarily mean that as an institution it has increased its clout within the PLA hierarchy, which is dominated by the army. This view is supported by examining the PLAAF's leadership over the past fifty years. This does not mean, however, that the situation is not gradually changing.

When Deng Xiaoping gained control of the CCP in 1978, one of his unstated purposes in concentrating on the PLAAF was to assert his authority over what he and other senior officials regarded as a potentially dangerous service.⁸³⁹ Deng's leadership group attached special political weight to the PLAAF, because Defense Minister Lin Biao had wrested control of the Air Force through PLAAF commander Wu Faxian during the Cultural Revolution, especially at the onset of his abortive coup against Mao in 1971. As a result of these and other power struggles in the Cultural Revolution that involved the Air Force, Party leaders thereafter sought to keep a much tighter rein over the PLAAF than the other service arms. Analysis of the background for the PLAAF's commanders and deputy commanders provides some insights into the evolution of the PLAAF's role within the PLA.

Commanders: The PLAAF has had eight commanders since 1949, including four during the past ten years (See Appendix A and B).⁸⁴⁰ The first four PLAAF commanders, covering

⁸³⁹ See John Wilson Lewis and Xue Litai, "China's Search for a Modern Air Force," *International Security*, Summer 1999; William W. Whitson, *The Chinese High Command: A History of Communist Military Politics, 1927-71*, New York, Washington, London: Praeger, 1973, p. 550; Stanley Karnow, *Mao and China: A Legacy of Turmoil*, Penguin Books, New York, 1972, p. 429. *Dangdai Zhongguo Kongjun*, p. 481. Lin Biao controlled the PLAAF through Wu Faxian and the PLA Navy through Li Zuopeng, who was the Navy's political commissar and basically ran the Navy. Events surrounding the fate of Wu and Li were very confusing after Lin Biao's death in a plane crash over Mongolia in September 1971. According to *Dangdai Zhongguo Kongjun* and recent interviews with PLA officials, Wu and Li Zuopeng were tried along with the Gang of Four. Wu was sentenced to seventeen years in prison and Li to twenty years.

⁸⁴⁰ The PLAAF's eight commanders since 1949 are as follows: Liu Yalou (October 1949 - May 1965), Wu Faxian (May 1965 - September 1971), no commander (September 1971 - May 1973), Ma Ning (May 1973 - April 1977), Zhang Tingfa (April 1977 - July 1985), Wang Hai (July 1985 - November 1992), Cao Shuangming (November 1992 - November 1994), Yu Zhenwu (November 1994 - December 1996), Liu Shun Yao (December 1996-Present). According to interviews in China, Wang Hai was relieved of duty in 1992 at the age of 67 for political reasons after he attended a meeting hosted by General Political Department Director and Military Commission Vice Chairman Yang Baibing without Jiang Zemin's knowledge. The following two commanders, Cao Shuangming (1982-1984) and Yu Zhenwu (1984-1986), were reportedly relieved of duty due to numerous aircraft accidents and lack of movement on certain core

1949-1985, were all ground force officers who moved into air force command positions. In 1985, Wang Hai became the first aviator to be selected as the commander.⁸⁴¹ Since then, all of the PLAAF's commanders have been career aviators. Table 9.1 below shows each commander's date of birth, age when they became commander, and the age they left office. With the exception of Liu Yalou, the age for the commanders assuming the position of commander has ranged from 50-63 years old. This shows a lack of a consistent policy, especially for Cao Shuangming and Yu Zhenwu.

Table 9.1 PLAAF Commanders' Ages

	Date of Birth	Commander	Left Office
Liu Yalou	1910	39	55 (died)
Wu Faxian	1915	50	56 (removed)
Ma Ning	1922	51	55 (replaced)
Zhang Tingfa	1918	59	67 (retired)
Wang Hai	1925	60	65 (retired)
Cao Shuangming	1929	63	65 (retired)
Yu Zhenwu	1931	63	65 (retired)
Liu Shunyao	1939	57	Currently in position

Source: *Kongjun da cidian*, Shanghai: pp. 799-854.

Overall, the PLAAF has made a concerted effort at reducing the age of its leaders. In 1988, almost two-thirds of the 32 lieutenant generals promoted were over 60 and about two-

modernization issues. Although Wang, Cao, and Yu had each reached the mandatory retirement age when they were replaced, they could have been extended if necessary.

⁸⁴¹ According to one informed PLA official, Ma Ning flew Il-28s as a young officer, thus making him the first pilot to be selected as the PLAAF commander. However, PLAAF biographies for Ma do not indicate this to be the case. According to *Kongjun da cidian*, editor, *Kongjun da cidian* [Air Force Dictionary], Shanghai: Shanghai Dictionary Publishing House, September 1996, p. 842, Ma's biography does not make any mention of attending flight school or being a pilot. In this biography, he moved directly from being a deputy operations division director in the 12th army's headquarters department before 1949 to serving as the PLAAF's 21st air division deputy commander and commander until 1967. Even if Ma did fly Il-28s for a short period, for all practical purposes, in 1985 Wang Hai became the first full-fledged aviator to become the commander.

thirds of the major generals were over 54.⁸⁴² However, for comparison purposes, all of these generals had already held their positions or equivalent positions for 1-5 years. Today, the PLAAF has approximately 150 general officer positions, including one general, twenty-five lieutenant generals, and 125 major generals. The average age of officers assuming the same positions as those in 1988 has been reduced by about 3-5 years (lieutenant generals are about 57 and major generals about 52), thus indicating a move toward a younger force. By comparison, an analysis of current senior USAF leaders shows that they entered the Air Force between 1966-1970, and were promoted to major general at age 47-49, lieutenant general at 48-51, and general at 52-53.⁸⁴³

While the PLAAF has succeeded in reducing the overall age of its leaders, the Air Force has lost all of its leaders with any operational wartime experience.⁸⁴⁴ When Wang Hai was commander (1985-1992), three of the four Headquarters Air Force deputy commanders, three of the MRAF commanders and two deputy MRAF commanders were Korean War veterans.⁸⁴⁵ By the early 1990s, almost all of these officers had retired. Today, there are no Korean War veterans left in the PLAAF, and virtually no one left from the 1958 conflict over the Taiwan Strait. This means that the historical experience today's leaders bring with them comes primarily from the Vietnam War of the 1960s, where the PLAAF's main involvement was its antiaircraft artillery troops stationed inside Vietnam and Laos, plus a handful of air engagements along the border.⁸⁴⁶

⁸⁴² *Zhu Rongchang*, pp. 799-854.

⁸⁴³ Information on USAF generals was taken from biographies available on the USAF internet link <http://www.af.mil/lib/bio/>.

⁸⁴⁴ Although the PLAAF has some input into selecting its leaders, the senior Army leadership is responsible for promoting PLAAF officers.

⁸⁴⁵ *Ibid.*, p. 85. While Wang Hai was commander, the HqAF deputy commanders who are Korean War veterans were Lin Hu, Li Yongtai, and Liu Zhitian. The other three MRAF commanders were Liu Yudi (Beijing), Sun Jinghua (Lanzhou), and Hou Shujun (Chengdu). The MRAF deputy commanders were Yao Xian (Beijing) and Han Decai (Nanjing).

⁸⁴⁶ Allen, Krumel, and Pollack, pp. 76-78. The official PLAAF history only dedicated a few pages to the Vietnam War, covering the PLAAF's involvement from August 1965 to March 1969. According to this account, the PLAAF began deploying units to Guangxi and Yunnan for war preparations to help the North Vietnamese in August 1964 following the Gulf of Tonkin incident. From August 20, 1965 to March 14, 1969, the PLAAF sent eight groups of AAA units from seven AAA divisions, 26 AAA regiments, eight AAA battalions, nine searchlight battalions and 14 radar companies to assist Vietnam. Altogether, PLAAF AAA units were involved in 558 battles, shooting down 597 U.S. aircraft and damaging 479, losing 15 AAA pieces, 4 AAA

Political Commissars: The PLAAF has had ten political commissars since 1949.⁸⁴⁷ There is no set template or discernible trends for these leaders (see Table 9.2 below). While six of them spent their entire career in the political commissar system, two served in command positions before becoming the political commissar, and two of them had a mix of command and political commissar positions. None of them have been aviators. The first four political commissars spent their entire career in the political commissar system (Wu Faxian became PLAAF commander under Lin Biao after being the political commissar for eight years). In an apparent attempt to weed out the political commissar influence in the PLAAF following Lin Biao's death, Ma Ning became the commander and Fu Chuanzuo became the political commissar in 1973 – both officers had spent their entire career in command positions, none of which were in PLAAF headquarters. Zhang Tingfa, who was the political commissar from 1975-1977 and the commander from 1977-1985, had spent his entire career in command positions. When Zhang was commander, his political commissar, Gao Houliang, had a mixed command and political commissar background. Zhu Guang, who was the political commissar with commander Wang Hai from 1985-1992, had served in all political positions, moving back and forth between Army and Air Force billets. Zhu's replacement, Ding Wenchang, had also spent his entire career in political positions, but they had all been PLAAF positions. The current political commissar, Qiao Qingchen, has a mixed command and political commissar background, having served as the deputy political commissar in the Jinan MRAF before moving up to become the commander of the Beijing MRAF. Just prior to becoming the PLAAF political commissar, he spent fifteen months as a PLAAF deputy commander.

radars, 280 troops killed and 1166 troops wounded. From December 29, 1970 to November 14, 1973, the PLAAF also sent AAA units to Laos to support Chinese road construction. During this period, the units shot down 17 aircraft and damaged three. In addition to aircraft shot down over Vietnam, the PLAAF history identifies three U.S. Air Force (one F-4B and two A-4B's) and two Navy (one A-3B and one A-6) aircraft and 17 unmanned recce drones that it shot down over or near Chinese territory.

⁸⁴⁷ Xiao Hua (October 1949 – February 1957), Wu Faxian (February 1957 - May 1965), Yu Lijin (May 65 – September 1968), Wang Huiqiu (September 1968 - May 1973), Fu Chuanzuo (May 73 – November 1975), Zhang Tingfa (November 1975 – Apr 1977), Gao Houliang (April 1977 - July 1985), Zhu Guang (July 1985 – November 1992), Ding Wenchang (November 1992 – February 1999), Qiao Qingchen (February 1999 – present). See *Kongjun da cidian*, pp, 799-856.

Table 9.2 PLAAF Political Commissars' Ages

	Date of Birth	Political Commissar	Left Office
Xiao Hua	1916	33	34 (to GPD)
Wu Faxian	1915	32	39 (to PLAAF commander)
Yu Lijin	1913	50	53 (to CAAC)
Wang Huiqiu	1911	57	59 (to Shenyang MR PC)
Fu Chuanzuo	1914	59	61 (retired)
Zhang Tingfa	1918	57	59 (to PLAAF commander)
Gao Houliang	1915	52	60 (retired)
Zhu Guang	1922	63	70 (retired)
Ding Wenchang	1933	59	65 (retired)
Qiao Qingchen	?	?	Currently in position

Source: *Kongjun da cidian*, pp. 799-854.

Deputy Commanders: Since 1949, the PLAAF has had thirty-two deputy commanders, who collectively have been responsible for the following general areas: schools, training, maintenance, logistics, equipment, research and development, operations, air defense, and discipline.⁸⁴⁸ The first fourteen deputy commanders were ground force officers who had served in the army until the PLAAF was formed in 1949. Immediately after the PLAAF and Air Defense Force (ADF) merged in 1957, the PLAAF had seven deputy commanders, two of whom came from the ADF. These were the last two deputies with an air defense background, even though the air defense component (SAM/AAA) of the PLAAF has been instrumental in defending China's airspace, including AAA troop involvement in the Vietnam War. Although one of the deputy commanders is always responsible for the air defense role, at least one of the deputy chiefs of staff (deputy directors of the Headquarters Department) generally has an air defense background. For example, Major General Chen Huiting, who was a deputy chief of staff in the late 1980s, had served as a SAM battalion and division commander, and as the deputy commandant of the SAM academy.

It was not until 1973 that the PLA assigned a pilot (Zhang Jihui) as a deputy commander. Between 1973 and 1982, all of the other deputy commanders had their roots in the ground forces as political commissars or commanders. In 1982, Wang Hai became the second pilot to be assigned as a deputy commander. Since then, at least eight of the thirteen deputy commanders

⁸⁴⁸ The PLAAF had as many as seven deputy commanders immediately following the merger with the Air Defense Force in 1957. During the 1960s and 1970s, the average was four deputy commanders. In the mid-1980s, the PLAAF tried to reduce the number from four to three, but found that they could not manage all of their responsibilities properly. Therefore, in 1987 a fourth deputy was added. This situation remains today.

have been pilots. The current political commissar, Qiao Qingchen, spent most of his career in political assignments, but also spent eighteen months as the Beijing MRAF commander and thirteen months as a PLAAF deputy commander before moving up to the political commissar position.

The most notable exceptions to assigning aviators as deputy commanders are Jing Xueqin, who was assigned as a deputy commander in 1993, and Ma Diansheng, who replaced Jing in September 1999. Both officers spent their career in the PLAAF's 15th Airborne Army, including the commander's position before moving up to PLAAF headquarters. Jing's appointment came at the same time the PLAAF upgraded its airborne forces from brigades to divisions and the Air Force began receiving its first Il-76s to support the airborne forces.⁸⁴⁹ Adding them as deputy commanders clearly indicates the elevation of the airborne forces in the PLAAF's force planning. The question is whether this planning is for internal or external operations. Jing's appointment coincided with one of the PLAAF's most important changes in campaign strategy, as the Air Force's 15th Airborne Army began changing into a rapid-reaction force (RRF). Although PLAAF airpower discussions in the late 1980s included ideas about fist units, these discussions centered on the airborne forces and not the aviation units. While the airborne forces were clearly included in plans for the RRF, it appears that the airborne forces did not actually form any operational RRFs until around 1992.⁸⁵⁰

⁸⁴⁹ This was also about the same time the PLAAF began consistently identifying the airborne forces as a branch. Previously, the airborne forces were not always listed as a branch.

⁸⁵⁰ *Junshi jingji yanjiu* [Military Economics Studies], No. 8, 1995. According to PLAAF commander Liu Shun Yao, since the PLAAF began receiving several Russian Il-76 transports in 1992, the airborne troops now have all-terrain, all-weather, omni-directional combat capabilities. See Sun Maoqing, "Make Efforts To Build Modernized People's Air Force: Interview With Air Force Commander Lieutenant General Liu Shun Yao," Beijing *Liaowang*, 14 April 1997, No. 15, pp. 20-21. In order to adapt to various adverse operational conditions, the airborne units have conducted exercises in the snowfields of the Greater Xingan Mountains in Northeast China, the hot jungles on the Shiwan Mountains in Guangxi, and the Kunlun Plateau, located 4,600 meters above sea level where the air is thin. See "China Employs Hi-Tech Equipment in Training To Improve Air Force Fighting Capacity," Hong Kong *Sing Tao Jih Pao*, 18 July 1997. Airborne troop training over the past few years appears to have focused primarily in and around Tibet and the Qinghai Plateau. At the same time, however, some airborne training has also concentrated on a Taiwan scenario. By reporting this type of activity, the government is apparently trying to send a signal to inhabitants of Tibet, Taiwan, and Xinjiang that the airborne forces are preparing for internal contingencies, should the need arise. See "Airborne Units Conduct Training Exercise in Tibet," *Xinhua*, 29 June 1999. Reporting of these types of exercises also points out some of the airborne forces' limitations. For example, during the 1996 military exercise opposite Taiwan, the PLAAF inserted a small contingent of airborne troops onto Haitan island, but this portion of the

PLAAF's Institutional Position: The PLAAF is further hindered in its ability to promote some programs and missions due to the position of its commander and political commissar within the overall PLA hierarchy. In the chain of command, the PLAAF, as a service (*junzhong*) subordinate to the Army, is only equivalent to one of the seven military regions. As such, the PLAAF commander and political commissar have an "army equivalent position" (*zhiwu dengji*) or "grade" that is only equal to a military region commander.⁸⁵¹ Even the current commander's position appears to have been downgraded over the past couple of years.

In May 1985, Wang Hai became the PLAAF commander and Zhu Guang became the political commissar. When ranks were reintroduced in October 1988, Wang and Zhu received the rank of general and lieutenant general, respectively.⁸⁵² Of the seventeen full generals, Wang was ranked last in protocol order. Zhu was still a lieutenant general when they both retired in November 1992.

exercise was scaled down due to inclement weather, again calling the reliability of Liu's statement into question. See "Chinese Exercise Strait 961: 8-25 March 1996," briefing presented by the US Office of Naval Intelligence at a conference on the PRC's military modernization sponsored by the Alexis de Tocqueville Institute, 11 March 1997. Although Commander Liu has touted the airborne army's all-weather capabilities, they are limited by the plane's capabilities to get them there.

⁸⁵¹ See the book's introduction for an explanation of the grade structure. In the US military, the terms "rank" and "grade" are effectively synonymous. In the PLA, however, they are quite distinct. Military ranks (*junxian*) were first instituted in 1955, then abolished in 1965. They were not reintroduced until 1988. Most importantly, all officers, regardless of service, are assigned a grade (*zhiwu dengji*), which is equivalent to an army command position or army equivalent position (AEP). Within the PLA, the AEP is a more accurate reflection than rank of authority and responsibility across service, branch, and organizational lines. Thus, while rank is a key indicator of position within the hierarchy for foreigners, AEP is still the key indicator within the PLA. Most importantly, an officer's grade equates to the amount of political and organizational clout he has within his service and within the PLA in general. This is confusing to foreigners, since commanders and political commissars are equals and hold the same grade, but sometimes they do not assume the same rank equivalent of their position (general/3-star for the PLAAF commander/political commissar) for several years. As a result, either the commander or the political commissar may have a higher rank than the other one. Regulations regarding retirement ages refer to AEP, not rank. Military pay is calculated on the basis of rank, AEP (grade), and time in service.

⁸⁵² Ranks were first established in 1955, but were abolished in 1965. See Srikanth Kondapalli, *China's Military: The PLA in Transition*, Delhi: Knowledge World, April 1999, Chapter 2, for an excellent discussion of the rank system.

Wang's replacement, Cao Shuangming, was promoted to general seven months later (May 1993). Cao's replacement in November 1994, Yu Zhenwu, was not promoted to general for thirteen months (January 1996) after assuming the position. Cao and Yu had both received the rank of lieutenant general when ranks were reinstituted in 1988. Zhu Guang's successor in November 1992, Ding Wenchang, was promoted to general four years later (November 1996). The current political commissar Qiao Qingchen, replaced Ding Wenchang in February 1999 and is still a lieutenant general.⁸⁵³ The current commander, Liu Shun Yao, replaced Yu Zhenwu in December 1996 and was not promoted to general for three and one-half years (June 2000).⁸⁵⁴ Unlike the US military, the rank is not automatically conferred when a person takes over a particular command position. According to PLA officials, the current rules for promotion include time in grade as a lieutenant general (at least four years), time in service, and position.

Liu Shun Yao assumed command at the age of 57 and theoretically will serve until he turns 65 in December 2004. Although Liu filled all of the necessary command squares (regiment, division, air corps, MRAF commander, and PLAAF deputy commander), interviews with PLA officials in China indicate that Liu is not necessarily a strong leader who will push for Air Force programs and changes in doctrine and strategy at the expense of the Army.

The stature of each organization within the PLA also depends upon the relationship of the leader with other military and political leaders and organizations. As can be seen from Tables 9.4 and 9.5 below,⁸⁵⁵ not all of the PLAAF commanders and political commissars have been

⁸⁵³ As of October 1999, the commander for two of the MRs (Beijing and Guangzhou) were full generals while the remaining five MR commanders were lieutenant generals.

⁸⁵⁴ According to PLA officials, promotion to full general is based on time-in-grade as a lieutenant general (at least four years), plus age, plus seniority, plus the position. This is why Liu and his immediate predecessors were not promoted to full general immediately upon assuming the commander's position.

⁸⁵⁵ *Kongjun da cidian*, 799-856. The PRC has had nine National People's Congresses: First - September 1954; Second - April 1959; Third - December 1964; Fourth - January 1975; Fifth - February 1978; Sixth - June 1983; Seventh - October 1987; Eighth - March 1993; Ninth - March 1998. The CCP has had fifteen Party Congresses: First - July 1921 (Shanghai); Second - July 1922 (Shanghai); Third - June 1923 (Guangzhou); Fourth - January 1925 (Shanghai); Fifth - April 1927 (Wuhan); Sixth - June 1928 (Moscow); Seventh - April 1945 (Yanan); Eighth - September 1956 (Beijing); Ninth - April 1969 (Beijing); Tenth - August 1973 (Beijing); Eleventh - August 1977 (Beijing); Twelfth - September 1982 (Beijing); Thirteenth - November 1987 (Beijing); Fourteenth - October 1992 (Beijing); Fifteenth - September 1997 (Beijing). Sources: Robert L. Worden, Andrea Matles Savada, and Ronald E. Dolan, ed., *China: A Country Study*, Washington, D.C.: Library of Congress, Foreign Research Division, 1988, pp. 619-625; and *People's Republic of China Year-Book 1984*, Beijing: Xinhua Publishing House, p. 140.

representatives at the National People's Congress (NPC). All of the commanders and political commissars have been members of the Party Congresses, and some of them have been members or alternate members of the Party Congress Central Committee. Besides Liu Yalou and Wu Faxian, the leader with the highest political standing was Zhang Tingfa, who was a member of the Politburo and the CMC. In addition, political commissar Gao Houliang was a member of the CMC at the same time as Zhang. They were the last two PLAAF members of the CMC.

Table 9.3 PLAAF Commander Political Appointments

	Liu Yalou (49-65)	*Wu Faxian (65-71)	Ma Ning (73-77)	*Zhang Tingfa (77-85)	Wang Hai (85-92)	Cao Shuangming (92-94)	Yu Zhenwu (94-96)	Liu Shunya (96-Pres)
NPC	1	2,3	4	5	3,5	6,7		
Party Congress	8	9	10	10,11,12	12,13,14	12,14	13, 14	
Central Committee	8	9		10,11,12	12,13,14	14	Alt 12, Alt 13	13
Politburo		Yes		Yes				
CMC	Yes			Yes				

* Wu Faxian and Zhang Tingfa also served as the political commissar before becoming the commander

Table 9.4 PLAAF Political Commissar Political Appointments

* See chart above for Wu Faxian and Zhang Tingfa

	Xiao Hua (49-57)	Yu Lijin *(57-65)	Wang Huiqiu (68-73)	Fu Chuanzuo (73-75)	Gao Houliang (77-85)	Zhu Guang (85-92)	Ding Wenchang (92-99)	Qiao Qingchen (99-Pres)
NPC		4,5			4, 5	8	7	?
Party Congress	8	8,11	Alt 7, 9	10	11, 12	12, 14	14	?
Central Committee	8, 11, 12			Alt 9, 10	Alt 12		14	?
Politburo								
CMC					Yes			

Based on a review of information in the annual *Directory of PRC Military Personalities* and interviews with US and Chinese military officials, it does not appear that there is a single

PLAAF general officer assigned as a deputy commander or second-level department director in any of the four general departments. Nor does it appear that there are any PLAAF general officers in the prestigious Academy of Military Science, where the PLA's strategy and doctrine is formulated. There is at least one PLAAF major general in the Political Department at the National Defense University (NDU). While there is only one PLAAF general officer in these organizations, there are Air Force senior colonel and colonel staff officers, instructors, and researchers.

While the PLAAF has implemented certain personnel reforms internally, the PLAAF's lack of status that permeates throughout the PLA has had incremental changes. Prior to the late-1990s, all PLAAF officers working in the four general departments (General Staff/GSD, General Political/GPD, General Logistics/GLD, and General Armament/GAD) had to wear an Army uniform regardless of their job. It was not until the late-1980s that a formal system was instituted to integrate all of the military region air force (MRAF/*junqu kongjun*) commanders into the military region command staff as deputy military region (MR/*junqu*) commanders. However, this command relationship was not entirely new to the PLAAF. During the mid-1950s, two PLAAF lieutenant generals, Luo Yuanfa and Wu Fushan, simultaneously served as MR deputy commanders and MRAF commanders in the Beijing and Guangzhou MRs, respectively.⁸⁵⁶ Both officers later became PLAAF deputy commanders (Luo in 1969 and Wu in 1975).

Foreign Relations: Since China began opening its doors in the late 1970s, the PLAAF's five commanders have emphasized direct contact with foreign air forces by leading an average of one delegation abroad per year and hosting visits to China by an average of two to four foreign air force commanders annually (See Appendix C).⁸⁵⁷ In addition, Zhu Guang became the first PLAAF political commissar to travel abroad when he visited the United States in 1988, and his successor, Ding Wenchang, led delegations to Cuba in 1996 and Portugal and Turkey in 1998. Based on an analysis of incomplete data, it appears that the PLAAF commanders and political commissars have visited at least twenty-five separate countries and hosted commanders from at least twenty-three countries worldwide.

⁸⁵⁶ *Kongjun da cidian*, pp. 801, 807.

⁸⁵⁷ Kenneth Allen and Eric McVadon, *China's Foreign Military Relations*, Washington, D.C.: The Henry L. Stimson Center, October 1999, pp. 53-55. Based on information available concerning the 23 PLAAF visits abroad, ten included just one country, six included two countries, and seven included three countries. The most involved high-level exchange programs (three or more visits) have been with Australia, Bangladesh, Egypt, Pakistan, Portugal, Russia, Thailand, Turkey, the United States, and Zimbabwe.

STRATEGY, DOCTRINE, AND MISSIONS

Strategy and Doctrine

The PLAAF's development of operational capabilities is tied to the evolution of the PLA's overall doctrine and strategy. Dr. Paul Godwin states,

The PLA has been shifting over the past twenty years from continental defense in depth to peripheral defense and maritime force projection, and from a ground-force dominated approach to war, to a multi-service joint operations doctrine. In conceptualizing the battlefield, the PLA has shifted from a two dimensional concept, where the ground war was the central focus, to a multidimensional battlespace, where space and cyberspace play roles as important as the traditional air-land-sea dimensions. The PLA has faced the major difficulty of the absence of any period of stability in which it could complete the organizational, training, and logistics changes required to implement a revised strategy and operational doctrine.⁸⁵⁸

The PLAAF's doctrine has progressed through several steps since 1949, but has not been able to move out from under the Army's umbrella.⁸⁵⁹ From the very beginning, the Army made it absolutely clear that the Air Force would remain subordinate to the Army. When the PLAAF was established in November 1949, a total of 5453 people were assigned, of which only twenty-nine had any aviation background. Of the remainder, 2938 had some type of technical background and 2515 came straight from the Army. In February 1951, the PLAAF's Party Committee officially confirmed that the "Air Force was formed on the basis of the Army."⁸⁶⁰ Later that year, PLAAF commander Liu Yalou wrote in *People's Air Force*, "The PLAAF must

⁸⁵⁸ Paul H.B. Godwin, "Compensating for Deficiencies: Doctrinal Evolution in the Chinese People's Liberation Army: 1978-1999," *Seeking Truth from Facts: A Retrospective on Chinese Military Studies in the Post-Mao Era*, Santa Monica, CA: RAND, 2001, pp. 91-92.

⁸⁵⁹ Hua Renjie, Cao Yifeng, and Chen Huixiu, editors, *Kongjun xueshu sixiang shi* [History of Air Force Theory], Beijing: Jiefangjun Publishers, 1991, pp. 294-331. This majority of this book discusses the history US and Soviet air force theory before discussing the history of the PLAAF's theory. One of the difficulties discussing the PLAAF's theory is the problem of translating certain terms. For example, the *Kongjun da cidian* [Air Force Dictionary] translates *zhanyi* as both operations and campaign, yet translates *zuozhan zhanyi* as operational campaign. The *Da cidian* does not even have a Chinese word for doctrine. The PLAAF also often uses the word *tiaoling* in the sense of doctrine rather than the literal translation of regulations.

⁸⁶⁰ *Zai lujun jichu shang jianshe kongjun*.

oppose two erroneous tendencies. The first tendency is to believe that the PLAAF is a new service that can disregard the legacy of the Army. The second tendency is to be complacent with just some of the Army's experience. Both of these tendencies are wrong and will impede the PLAAF's development."

At the same time that the Air Force Party Committee confirmed the Army as the PLAAF's base, the PLAAF was also stressing self-reliance. However, since the PLAAF did not have any experience in developing aviation doctrine, the Party Committee also confirmed that the Soviet Air Force would be the model for building the PLAAF. Therefore, the PLAAF invited the Soviet Air Force to send advisors to China to help develop the PLAAF's doctrine. It was not until 1957 that the PLAAF began to develop and teach its own doctrine and make changes to Soviet doctrine, based on the PLAAF's experience in the Korean War and operations against the Nationalists on the islands off of Zhejiang, Province.

In 1959, the Air Force created the PLAAF Regulation Editing Committee (*kongjun tiaoling bianshen weiyuanhui*).⁸⁶¹ From 1959-1966, the Committee wrote 306 regulations and teaching documents that were divided into six categories: national, military general, air force, military branches (sometimes referred to as service arms), weapons, and specialized material. These categories were further divided into four functional systems: military general, political, maintenance, and logistics. Materials were also written for thirty-four additional functional and specialty areas, including operations, training, intelligence, communications, and navigation.

Prior to and after the PLAAF's merger with the Air Defense Force in 1957, the PLAAF's primary mission was air defense, so all weapons were acquired to fulfill this role.⁸⁶² For example, during the early years, seventy percent of the aviation force consisted of fighters. Even the aviation force's bombers and ground attack aircraft, combined with the airborne forces, equaled a smaller percentage of the total force than the SAM, AAA, and radar troops.

In July 1988, the General Staff Department's Training Department finally published *Air Force Operational Art* (*Kongjun zhanyi xue*) that explained the characteristics of operational/campaign art, the development of operations/campaign theory (*zhanyi lilun*), and the mission of the PLAAF's corps and regiments as these three parts pertain to a unified command organization.⁸⁶³ The document also discussed the special characteristics of PLAAF's operations in an electronic countermeasure (ECM), nuclear, chemical, and biological combat environment. The Air Force's focus on "offensive" (*jingong*) operations in a combined arms operation includes the use of aviation troops for air cover (*kongzhong yanhui*), deep strikes (*zongshen kongzhong tuji*), close air support (*jinju huoli zhiyuan*), airborne reconnaissance (*hangkong zhencha*), air transport (*kongzhong yunshu*), air rescue (*kongzhong jiuhu*). It also includes the use of the

⁸⁶¹ Hua, Cao, and Chen, p. 310.

⁸⁶² Ibid, p. 311.

⁸⁶³ Ibid., p. 312-313.

paratroops for seizing and controlling key points, attacking rear areas, destroying and/or controlling landing areas such as airfields.

Although PLAAF writings mention the broader PLA doctrine and strategic concepts of people's war, people's war under modern conditions, and people's war under modern high-tech conditions, the Air Force tends to focus more on campaign strategy, campaign tactics, and tactical training. During the late 1950s and 1960s, the PLAAF compiled teaching materials on tactics, but it wasn't until the 1980s that the PLAAF published several documents on tactics theory (*zhanshu lilun*) for each of its aviation troop components and airborne troops.⁸⁶⁴

As an arm of the PLA, the PLAAF has traditionally conducted its combat operations as a series of subordinate campaigns within the PLA's overall campaign. The PLAAF describes a campaign as "using from one to many aviation, air defense, or airborne units to carry out a series of combined battles according to a general battle plan to achieve a specified strategic or campaign objective in a specified time."⁸⁶⁵ During 1997, commander Liu stated, "The PLAAF must improve its capabilities in actual combat by highlighting campaign and tactical training. He emphasized that campaign training involves air deterrence, air interdiction, air strikes, and participation in joint exercises."⁸⁶⁶ In February 1998, Liu stated, "The PLAAF must adhere to reform and innovation and strive for new progress in improving capabilities in actual combat. For some time to come, all PLAAF units shall further highlight campaign training, which mainly involves air deterrence, air interdiction, air strikes, and participation in the joint combat exercises of the three services. Tactical training shall mainly highlight combat training in electronic warfare, over-the-horizon air combat, night combat, and combat involving multiple arms and aircraft types, so that the training of air force units is more relevant to actual combat."⁸⁶⁷

While the PLA has always had an active defense (*jiji fangyu*) strategy, it was not until PLAAF commander Wang Hai laid out a program in 1987 that the Air Force formally stressed having a simultaneous offensive and defensive capability (*gongfang jianbei*).⁸⁶⁸ Wang

⁸⁶⁴ Ibid., p. 313.

⁸⁶⁵ Ibid., pp. 312-331. Teng and Jiang, p. 152.

⁸⁶⁶ Sun Maoqing, "Make Efforts To Build Modernized People's Air Force: Interview With Air Force Commander Lieutenant General Liu Shun Yao," *Liaowang*, 14 April 1997, No. 15, pp. 20-21.

⁸⁶⁷ Kuan Cha-chia, "Commander Jiang Speeds Up Army Reform, Structure of Three Armed Services To Be Adjusted," *Kuang chiao ching*, No 305. 16 February 1998, pp. 14-18, in FBIS-CHI-98-065, 16 February 1998.

⁸⁶⁸ Hua, Cao, and Chen, p. 312. Wang Hai called for *jianli gongfang jianbeixing kongjun*.

emphasized that the combined arms combat environment of the 1980s required a force that could move quickly over long distances and fight in an electronic environment, needed to have the capability to attack an enemy, and need to keep the PLAAF from sustaining complete or at least only minor damage from an enemy air attack. Starting in 1996, Chinese leaders, including CMC Chairman Jiang Zemin and PLAAF commander Liu Shun Yao, began to re-emphasize publicly the PLAAF's capability to fight offensive battles.⁸⁶⁹ In 1997, General Liu stated,

The Chinese Air Force plans to build up state-of-the-art weapons systems by early next century, including early warning planes, electronic warfare warplanes, and surface-to-air missiles. The PLA Air Force is now able to fight both defense and offense battles under high-tech conditions. The Air Force is now capable of waging high-level long-distance combat, rapid maneuverability, and air defense, and is able to provide assistance to navy and ground forces. The Air Force now sources most of its equipment domestically, fielding a large number of Chinese-designed and produced high-quality fighters, attackers, bombers, reconnaissance aircraft, and special purpose planes. Over the next few years, the Chinese Air Force will enhance its deterrent force in the air, its ability to impose air blockades, and its ability to launch air strikes, as well as its ability to conduct joint operations with the ground forces and navy.⁸⁷⁰

One of the most important strategic changes for the PLAAF took place in the late 1980s when the PLA began forming a rapid-reaction force consisting of "fist" (*quantou*) units. The rapid-reaction strategy is based on the premise that China will only be engaged in local wars for the foreseeable future, that the PLA must strike to end the war quickly and meet the political objectives, and that cost is a big factor as equipment becomes more expensive to use and

⁸⁶⁹ Oliver Chou, "President Calls for Hi-Tech Push by Air Force," *South China Morning Post*, 3 March 1999. The timing of the first comments on an offensive capability came from Liu Shun Yao as he took over the commanders position in December 1996 and as Taiwan began final preparations to receive the first squadron of 150 F-16s in April 1997.

⁸⁷⁰ See Sun Maoqing, "PLA Commander on Modernizing Air Force," *Liaowang*, 14 April 1997, No. 15, pp. 20-21; and Hua Chun, Chang Tun-Hua, Kuo Kai, "Air Force Trains Crack Units Troops for Offensive, Defensive Operations Interviewing Lieutenant General Liu Shun Yao, PLA Air Force Commander, Hong Kong *Ming Pao*, 2 August 1997, in FBIS-CHI-97-226, 2 August 1997; and speech by Liu Shun Yao, "Comprehensively Push Forward PLA Modernization Building," *Jiefangjun bao*, 24 December 1998.

replace.⁸⁷¹ China would conduct any future wars as part of its active defense strategy, which consists of three phases: strategic defense, strategic stalemate, and strategic counterattack. Based on this strategy, some Air Force leaders firmly believe that their intelligence, mobility, and attack capabilities will be sufficient to allow them to react appropriately to any situation, including gaining air superiority, supporting the ground forces, and conducting counterattacks against targets inside the enemy's borders.⁸⁷²

Missions

Over the past fifty years, the basic missions of the PLAAF have not changed appreciably. The first mission the CMC assigned to the fledgling PLAAF in 1949 was the air defense of Beijing and Shanghai against Nationalist air raids. This mission expanded to include northeast China during the Korean War and to the southeast provinces during the 1958 Taiwan Strait crisis. Today, the PLAAF still describes its primary mission as defending China's national airspace, supporting the ground and naval forces, attacking enemy rear echelon positions, and carrying out aerial transport and airborne reconnaissance.⁸⁷³ However, this can best be described as defending China's major cities and industrial areas, which can clearly be seen by looking at the location of the PLAAF's airfields, combat aircraft, surface-to-air missiles (SAMs), and antiaircraft artillery (AAA). The major difference today is that the PLAAF's aircraft have longer

⁸⁷¹ Nan Li, "The PLA's Evolving Warfighting Doctrine, Strategy, and Tactics, 1985-95: A Chinese View," and Paul H.B. Godwin, "From Continent to Periphery: PLA Doctrine, Strategy, and Capabilities Toward 2000," both in David S. Shambaugh and Richard H. Yang, eds. *China's Military in Transition*, Oxford: Clarendon Press, 1997, pp. 284-312. See also James Harris, et al, "Chinese Defense Policy and Military Strategy in the 1990s, in *China's Economic Dilemmas in the 1990s: The Problems of Reforms, Modernization, and Interdependence*, Washington DC: Joint Economic Committee, Congress of the United States, April 1991, pp. 648-649. The concept of active defense means taking tactically offensive action within a basically defensive strategy. The defending forces undertake offensive operations to wear down the adversary while he is strategically on the offensive and attacking. It is the opposite of passive defense, which means the defending forces simply resist without attempting to weaken the adversary as he prepares to attack or is actually on the offensive.

⁸⁷² Allen, Krumel, and Pollack, p. 111.

⁸⁷³ *Shijie junshi nianjian* [World Military Yearbook], published by PLA Press, in 1985, 1987, 1989, 1990, 1991, 1992, 1993-94, 1995-96, 1997, 1998, 1999. *Kongjun da cidian*, p. 8, 313. The PLAAF's primary missions are national air defense (*guotu fangkong*), support ground and naval operations (*zhiyuan lu, haijun zuozhan*), attack enemy rear echelon positions (*dui di houfang shishi kongxi*), and carry out aerial transport (*kongyun*) and airborne reconnaissance (*hangkong zhencha*).

legs and the introduction of the S-300 SAM provides a larger defensive envelope. Published PLAAF sources also refer to informal, tertiary missions, such as assisting socialist construction, providing air services for disaster relief and air rescues, and artificial rainmaking support for farmers.⁸⁷⁴ During 1998, the PLAAF's transport division in the Guangzhou MRAF provided support during massive flooding in southern China.

While the PLAAF states that its secondary mission is supporting ground and naval forces, it has never successfully carried out direct support (*zhijie zhiyuan*) to the ground troops and officially states, "In weighing the advantages and disadvantages of the two types of support for ground forces in future wars, indirect support (*jianjia zhiyuan*) should be the primary type of support and direct support should be the secondary method."⁸⁷⁵ Since the PLA as a whole is just beginning to seriously address joint operations and logistics, the Air Force's ability to support the ground forces well is still questionable. Very little information is available in open

⁸⁷⁴ The 1985-1999 Yearbooks provide progressively greater detail about the PLA's organizational structure. In addition, *Zhongguo Kongjun* magazine has carried numerous articles detailing this type of support.

⁸⁷⁵ Teng and Jiang, pp. 222-223. According to Teng and Jiang, direct support is attacking enemy targets close to the front positions of the ground forces or enemy targets directly threatening to influence the ground forces. Indirect support is attacking targets that are relatively far from the ground forces. There are four aspects of direct support that are detrimental. First, air and ground fire power is interactive (*huxiang zhiyue*). When air and ground forces are carrying out combat missions in the same area, aviation troop activity and all types of ground force artillery shell trajectories are interactive, and realistically restrict each service's and branch's full capabilities. Second, airborne identification of ground targets is difficult. When aircraft are flying low at high speeds, there are only a few tens of seconds between discovering a target and correcting the flight path and from aiming to firing, so there is not enough time to distinguish between the enemy and friendly forces, even when using modern electronic IFF systems and guided munitions. Third, air and ground coordination is difficult. Since there are many services and branches involved in a war, and the weapons used are of all types, air and ground combat is intertwined, especially where the battle is constantly changing, and the air and ground mission is constantly changing, coordination between the air force and ground forces is extremely difficult. Fourth, it is difficult to make full use of one's forces because of the above limitations, plus terrain limitations, so generally only tactical support is suitable and cannot implement the full use of military force. The air force can avoid these problems by providing indirect support. Since attacks on targets in indirect support are far from the ground forces, they must have some effect in terms of time and process in order to help the ground forces. There are four methods of operational coordination the AF and ground forces must pay particular attention to: area (*quyu*), time (*shijian*), target (*mubiao*), and altitude (*gaodu*) coordination. Area coordination is mostly used for indirect coordination.

source material about PLAAF support for the Navy, but PLAAF fighters have reportedly begun routinely flying over water beyond the coastline – something not ordinarily done in the 1980s.⁸⁷⁶

Since the early 1950s, one of the PLAAF's primary tasks has been to gain air superiority (*duoqu zhikongquan*) over the battlefield.⁸⁷⁷ The PLAAF divides air superiority into two types: strategic (*zhanlue*) and tactical (*zhanyi zhanshu*). Strategic air superiority is defined as the ability to influence a war by conducting air superiority for the entire the war or a specific period of time at a particular location or locations over a sustained period of time. Tactical air superiority is defined as the ability to influence a battle by conducting air superiority over a critical or limited area for a short period of time.

In order to carry out these evolving missions, the PLAAF has adjusted its administrative and operational structure several times.

ADMINISTRATIVE STRUCTURE

The PLAAF's organizational system (*tizhi*) includes the administrative structure (*lingdao zhihui jiguan*), five operational branches/service arms (*bingzhong*), specialized support units (*zhuanke baozhang budui*), and logistics and maintenance support units (*houqin jishu baozhang budui*),⁸⁷⁸ plus academies/schools (*xueyuan/xuexiao*), and research institutes (*yanjiusuo*).⁸⁷⁹ There are also maintenance and logistics support units such as repair facilities (*xiulichang*), hospitals (*yi yuan*), and sanitoriums (*liaoyangyuan*). In addition, there are various types of training regiments (*xunlian tuan*) and training groups (*xunlian dadui*) that are directly subordinate to either Headquarters Air Force or to the seven Military Region Air Force Headquarters.

Since its founding, the PLAAF's chain-of-command has basically been organized into four administrative and operational levels: Headquarters Air Force (HQAF/*kongjun*); military region air forces (MRAF/*junqu kongjun*); air corps (*jun*), command posts (*zhihuisuo*), and bases (*jidi*); and operational units (*budui*). Depending on the type of unit, operational units are organized into divisions (*shi*), brigades (*li*), regiments (*tuan*), groups (*dadui*), squadrons (*zhongdui*), battalions (*ying*), companies (*lian*), platoons (*pai*), squads (*ban*), and flights (*fendui*). Operational units can

⁸⁷⁶ Interviews with government officials in the United States, Taiwan, and Japan.

⁸⁷⁷ Hua, Cao, and Chen, p. 316.

⁸⁷⁸ The PLAAF identifies the following as specialized support units: radar, communications, chemical defense, reconnaissance, and electronic countermeasures troops. Xin Ming, editor, *Zhongguo Renmin Jiefangjun Kongjun shouce* [People's Liberation Army Air Force Handbook], Qingdao: Qingdao Publishers, June 1991, p. 97.

⁸⁷⁹ See *Kongjun da cidian*, pp. 142-143; and Xin Ming, pp. 97-98. See Appendix H for the history of the PLAAF's research institutes.

be directly subordinate to HqAF, the MRAF headquarters, an air corps, a command post, or a base.⁸⁸⁰ The seven MRAFs, in protocol order, are Shenyang (*Shenkong*), Beijing (*Beikong*), Lanzhou (*Lankong*), Nanjing (*Nankong*), Guangzhou (*Guangkong*), Jinan (*Jikong*), and Chengdu (*Chengkong*).⁸⁸¹

Over the past fifty years, the overall administrative organization at PLAAF headquarters can be compared to a deck of cards that occasionally gets reshuffled.⁸⁸² Almost no new cards have been added and the existing cards have merely been moved to a different location in the deck, where the offices still retain the same responsibilities (See Appendix D and E). Headquarters Air Force, located in Beijing, is equivalent to the US Air Force's Air Staff and is organized into four first-level (*yiji*) or major (*da*) administrative departments (*bu*) – Headquarters Department (*silingbu/kongsi*), Political Department (*zhengzhibu/kongzheng*), Logistics Department (*houqinbu/konghou*), and Equipment Department (*zhuangbeibu/kongzhuang*) – and their subordinate second-level (*erji*) functional (*yewu*) departments (*bu*), bureaus (*ju*), divisions

⁸⁸⁰ In the PLAAF, aviation units are organized into air divisions, regiments, groups, and squadrons, and aviation maintenance units are organized into groups, squadrons, and flights. The air defense and support units are organized into divisions, brigades, regiments, battalions, companies, platoons, and squads. A command post/base is slightly lower than an air corps (the commander is equal to a deputy corps commander); a brigade is slightly lower than a division (the brigade commander is equal to a deputy division commander); a battalion and aviation group are equal; a company and aviation squadron are equal; and a platoon and flight are equal. See Xin Ming, pp. 97-98.

⁸⁸¹ Protocol order plays an important role in the PLA's organizational structure. For example, the army, air force, and navy are always listed in the same order (*lu hai kong*) because of the dates they were established. The four general departments are always listed as GSD, GPD, GLD, and GAD, and the PLAAF's counterparts are always listed as the Headquarters Department, Political Department, Logistics Department, and Equipment-Technical Department. Within the PLAAF, the seven MRAFs are virtually always listed in the order of Shenyang, Beijing, Lanzhou, Nanjing, Guangzhou, Jinan, and Chengdu, based on the dates they were established (for example, see Wang Hai, *Wang Hai Shangjiang: wode zhandou shengya* [General Wang Hai: My Combat Career], Beijing; Zhongyang wenxian chubanshe [Central Literature Publishers], February 2000, p. 300. For the most part, the PLA lists the military regions as Shenyang, Beijing, Lanzhou, Jinan, Nanjing, Guangzhou, and Chengdu. The reason the MRs and MRAFs are in a different protocol order is because the MRs were established in a different order than the MRAFs.

⁸⁸² For example, over the years, the training department and schools department have been first level departments, have merged, and have been separated several times, but their functions have not changed.

(*chu*), offices (*ke*), sections (*zu*), and branches (*gu*).⁸⁸³ Historically, the Headquarters, Political, and Logistics Departments have always existed as first-level departments, while other departments have moved between being first-level and second-level departments. These three departments are virtual mirror images of the PLA's three general departments (GSD, GPD, and GLD).

In May 1976, the Aeronautical Engineering Department (*hangkong gongchengbu/konggong*), which had been downgraded to a second-level department in 1969, was re-established as the fourth first-level department, and changed its name to the Equipment-Technical Department (*kongjun zhuangbei jishubu*) in November 1992.⁸⁸⁴ Following the April 1998 creation of the General Armament Department, the PLAAF changed the name of the Equipment-Technical Department to the Equipment Department (*kongjun zhuangbeibu/kongzhuang*).⁸⁸⁵

A note here on terminology. When the term *kongjun* is used by itself, it generally means the PLAAF as a whole or just Headquarters Air Force (HqAF) – this is easily determined by the context. When the term *kongjun silingbu* is used, it refers to the Headquarters Department within HqAF – it does not mean Headquarters Air Force. The meaning of the terms *jiguan* or *lingdao jiguan* generally refer to HqAF as an entity or the HqAF command staff. However, if the terms are used in an article written at a lower level such as at a regiment, they can also refer to the headquarters and command staff at that level or any higher level (division, air corps, MRAF, etc.), but the meaning is usually clear from the context of the article. The command staff at each level specifically refers to the unit's Party Committee Standing Committee (*dangwei changwei*), which includes the commander, political commissar, deputy commanders, deputy political commissars, the chief of staff (director of the Headquarters Department), deputy chiefs of staff, and the three other first-level department directors. While the chief of staff and director of the political department have always been co-equals, the directors of the other two first-level departments (logistics and aeronautical engineering/equipment) have always been slightly lower in the hierarchy. For example, whereas the chief of staff and director of the political departments

⁸⁸³ The four first-level departments, commonly referred to as the *si da bu*, are Headquarters (*silingbu/kongsi*), Political (*zhengzhibu/kongzheng*), Logistics (*houqinbu/konghou*), and Equipment-Technical (*zhuangbeijishubu/kongzhuang*). In most cases in the PLAAF, the term *jishu*, normally translated as "technical" refers to maintenance, but the meaning is generally clear from the context. For example, the PLAAF's *jishu budui* are maintenance troops for equipment and weapons systems other than aircraft. *Kongjun da cidian*, 148, calls the administrative elements below HqAF's first-level departments vocational (functional) branches (*yewu bumen*).

⁸⁸⁴ *Ibid.*, p. 146.

⁸⁸⁵ 1999 Yearbook, p. 103.

have the grade of a military region deputy leader (*junqu fuzhi*), the grade for the logistics and equipment department directors are only that of an army leader (*zheng jun*).

As discussed in Chapter 1, the PLA has six administrative levels (*zongbu*/general office, *zhanqu*/theater of war, *juntuan*, *bingtuan*, *budui*, and *fendui*), which are classified as operational (*zhanyi*) or tactical (*zhanshu*) functional organizations. Within the Air Force, MRAFs are classified as operational (*zhanyi*) organizations at the *juntuan* level under the dual command of Headquarters Air Force and the MR.⁸⁸⁶ The MRAF's primary responsibilities are to provide air defense for strategic areas, to provide support the ground and naval forces, and to provide leadership management for logistics and maintenance support for subordinate units. Air corps are operational and tactical (*zhanshu*) organizations at the *bingtuan* level, that are subordinate to the MRAFs. Air corps have subordinate aviation, AAA, SAM, and radar units, which are responsible for air defense in a particular area and for providing support to ground and naval forces. Air divisions are tactical organizations at the *bingtuan* level, air regiments as tactical organizations at the unit (*budui*) level, and flying groups and squadrons are tactical organizations at the flight (*fendui*) level.

PLAAF Branches

The PLAAF consists of five branches/service arms (*bingzhong*): aviation (*hangkongbing*), AAA (*gaoshepaobing*), SAM (*dikong daodanbing*), radar (*leidabing*), and airborne (*kongjiangbing*).⁸⁸⁷ During the 1980s, the PLAAF identified its communication troops (*tongxinbing*) as a branch, and oftentimes did not list the airborne troops as a branch. However, all PLAAF publications during the 1990s have identified the airborne troops as a branch and identified the communication troops as a specialized support unit, not a branch. Further information on the five branches is discussed in Appendix F.

The PLAAF also makes a clear distinction in its writings between aviation (*hangkongbing*), meaning aircraft, and air defense (*dimian fangkongbing*), which includes AAA, SAM, and radar troops. This practice is a legacy held over from the merger of the PLAAF and PLA Air Defense Force in 1957. This preference for aircraft is also shown in the PLAAF's description of the aviation force as the main arm, even though the PLAAF's AAA and SAMs have shot down more aircraft over the years than the combat aircraft.⁸⁸⁸

⁸⁸⁶ Xin Ming, pp. 98-99.

⁸⁸⁷ The PLAAF's protocol order for its branches are aviation, AAA, SAM, radar, and airborne. AAA troops are sometimes referred to as *yipao* and SAM troops as *erpao*, which often causes confusion with the PLA's Second Artillery Corps (*dierpaobing/erpao*).

⁸⁸⁸ According to the PLAAF's official history, the Air Force has shot down 1,474 and damaged 2,344 aircraft of all types since 1949, including involvement in "liberating Tibet," in the "War to Resist America and Aid Korea," in numerous engagements with Nationalist and U.S.

Aviation. The aviation branch is described as the primary branch and consists of fighter (*qianjiji hangkongbing*), ground attack (*qiangjiji hangkongbing*), bombers (*hongzhaji hangkongbing*), transports (*yunshuji hangkongbing*), and reconnaissance (*zhenchaji hangkongbing*) troops/units. Aviation divisions are described as tactical organizations that carry out operational missions for the MRAF or air corps, or they can carry out independent missions.⁸⁸⁹ The administrative structure of an aviation division includes a Headquarters Department, Political Department, Field Station (*changzhan*) for logistics support, and a Maintenance Division (*jiwuchu/gongcheng jiwuchu*). Aviation regiments are tactical units composed of varying weapon systems and equipment that carry out operational missions for higher authorities, or they can carry out independent missions. An aviation regiment's administrative organization has a Headquarters Department, Political Department (*zhengzhibu*), and Maintenance Division (*jiwuchu*). The division-level Field Station provides logistics support for the regiment. Air regiments have subordinate flying and maintenance groups (*dadui*). A flying group (*feixing dadui*) is the basic unit for carrying out the regiment's operational missions and political work. A flying squadron (*feixing zhongdui*) normally consists of three bombers or four fighters, ground attack aircraft, or reconnaissance aircraft and carries out the group's mission or independent missions.

Ground-Based Units. Over the past fifteen years, the PLAAF has tried various organizational structures for its ground-based (*dimian budui*) AAA, SAM, and airborne branches, which are considered tactical units,⁸⁹⁰ as well as for its radar units. The administrative structure for ground-based divisions and brigades includes a Headquarters Department, Political Department, Logistics Department, and Maintenance Department (*jishubu*). However, it appears that the PLAAF may have changed the Maintenance Department to an Equipment Department (*zhuangbeibu*).⁸⁹¹ Ground-based divisions normally have subordinate regiments, battalions, companies, platoons, and squads. Ground-based brigades normally have subordinate battalions, companies, platoons, and squads. While regiments generally have subordinate battalions, they oftentimes skip the battalion level and have directly subordinate companies. The administrative structure for ground-based regiments includes a Headquarters Department, Political Division

aircraft over the Taiwan Strait, in the "War to Aid Vietnam and Resist U.S. Aggression," and in the 1979 "self-defensive counterattack" against Vietnam. These figures include air-to-air combat (less than 200 aircraft) and aircraft shot down by the PLAAF's AAA and SAMs (over 3,500 aircraft). See *Dangdai Zhongguo Kongjun*, Forward; and Kong Zhengxuan, "Building an Air Force with Offensive and Defensive Capabilities," *Jiefangjun bao*, 7 November 1999.

⁸⁸⁹ *Kongjun da cidian*, p. 149. Xin Ming, p. 98-102.

⁸⁹⁰ Ibid.

⁸⁹¹ A 14 January 2000 *Jiefangjun bao* article identifies a radar brigade Equipment Department in the Beijing MRAF.

(*zhengzhichu*), Logistics Division (*houqinchu*), and Maintenance Division (*jiwuchu*). Ground-based divisions, brigades, and regiments can be directly subordinate to Headquarters Air Force, an MRAF, or an air corps.

SAM and AAA. Prior to 1985, SAM and AAA units were structured as separate organizations. In most cases, they were organized into divisions, with their subordinate regiments. In other cases, the regiment or brigade was the highest level structure. In 1985, the PLAAF began restructuring some of its AAA and SAM regiments into combined brigades (*hunchenglu*),⁸⁹² with the goal of eventually combining as many SAM and AAA units as possible. The process involved turning over most of the AAA to the army, and combining some of the remaining AAA regiments with SAM regiments into combined brigades. By the end of the 1980s, all of the SAM and AAA divisions had apparently been abolished, but some individual SAM and AAA regiments and brigades still existed.⁸⁹³ By the end of the 1990s, the PLAAF had re-instituted the division level, at least for SAMs, and had apparently raised at least some, if not all, of the combined brigades to a combined division (*hunchengshi*) level.⁸⁹⁴ This change probably reflects the PLAAF's acquisition of the S-300s from Russia, and an increased number of SAMs overall, plus the view that the combined brigades may not be the best solution to accomplishing the air defense mission.

Airborne. The airborne forces have also gone full circle. The PLAAF's airborne forces began in the early 1950s as a single brigade and then expanded to become a division.⁸⁹⁵ In 1961, the CMC redesignated the PLA's 15th Army as the PLAAF 15th Airborne Army (*kongjun kongjiangbing 15 jun*) and subordinated the original airborne division to this new organization. By the mid-1970s, the army had three airborne divisions.⁸⁹⁶ Sometime after 1984, the three

⁸⁹² 1991 Yearbook, p. 65.

⁸⁹³ Allen, 1991, Section 17. An interview with a senior PLAAF officer in April 1989 indicated that the PLAAF was not pleased with the process of combining all of the AAA and SAMs into combined brigades and was considering various options.

⁸⁹⁴ Yan Jin, "Chen Shikun, beikong daodan mou shi kaizhan 'xuexi gao Keji renren dong junshi' huodong," *Jiefangjun Bao*, 27 May 1999; Zhang Jinyu, "Beikong huncheng lu mou shi yindao guanbing fayang gan daying pin jingsheng gongke xunlian nan ti," *Jiefangjun bao*, 20 May 1999; Wang Jiqing, Yao Jian, "Beikong daodan mou shi qufen cengci peiyang xin zhuangbei qushou," *Jiefangjun bao*, 23 September 1998.

⁸⁹⁵ Allen, Section 17.

⁸⁹⁶ *Handbook on the Chinese Armed Forces*, Washington, D.C.: Defense Intelligence Agency, DDI-2680-32-76, July 1976, pp. 4-47.

divisions were reduced to brigades,⁸⁹⁷ but were again enlarged to divisions in 1993,⁸⁹⁸ each with about 10,000 troops.⁸⁹⁹

Radar. During the 1980s and early 1990s, the basic radar unit was the regiment,⁹⁰⁰ but radar brigades were noted in the Beijing and Guangzhou MRAF's in 1999-2000.⁹⁰¹ This indicates that the number of radar units in each military region has grown considerably, thus necessitating higher level headquarters to maintain a proper span of control. Surprisingly, the Chengdu MRAF still appears to be based on a regiment level, even though their radar stations span the border from half way through Vietnam to Pakistan.

Communications. Communications troops (*tongxinbing*) are organized into communications, navigation systems, and postal units. It appears that each MRAF has at least one central communications station (*tongxin zongzhan*), which is probably at the regiment level, and is most likely located near the MRAF headquarters. Within the MRAFs there are communications battalions, stations (*zhan*), companies, and teams (*dui*) that are assigned to the various PLAAF units. On an airbase, the communications unit is responsible for all of the flight navigation aids, such as the runway beacon transponders.

Early Administrative Structure

In March 1949, the CMC established a subordinate Aviation Bureau (*hangkongju*) in Beijing, with Chang Qiankun as the director and Wang Bi as the political commissar and sixty-four staff members.⁹⁰² Between April 1949 and February 1950, the Aviation Bureau formed an Aviation Division (*hangkongchu*) in each of the six MRs (Dongbei, Huabei, Xibei, Huadong, Zhongnan, and Xinan). The Bureau also set up subordinate Aviation Offices (*hangkong bangongshi*) in Beijing, Jinan, Nanchang, Changsha, Wuhan, and Shanghai, and Aviation Stations (*hangkongzhan*) in Tianjin, Xuzhou, Qingdao, Hangzhou, Taiyuan, and Zhangjiakou. The Aviation Bureau was organized administratively as follows:

⁸⁹⁷ *Handbook of the Chinese People's Liberation Army*, Washington, D.C.: Defense Intelligence Agency, DDB-2680-32-84, November 1984.

⁸⁹⁸ "PLA Airborne Brigades Become Divisions" *Jane's Defence Weekly*, Vol. 20, No. 14, 2 October 1993, p. 12.

⁸⁹⁹ Department of Defense, "The Security Situation in the Taiwan Strait." Report submitted by Secretary of Defense William Cohen to the US Senate as directed by the FY99 Appropriations Bill, 17 February 1999.

⁹⁰⁰ Xin Ming, pp. 111-112.

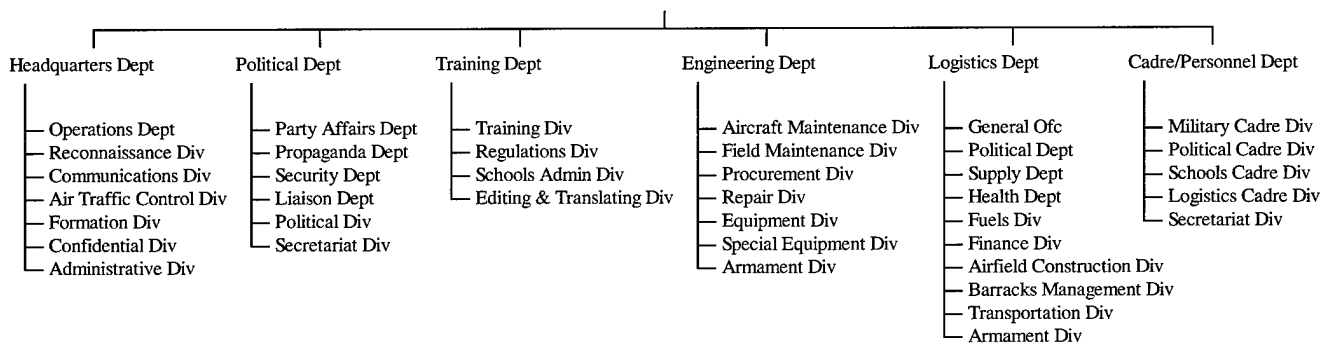
⁹⁰¹ *Jiefangjun bao* articles on 26 May 1999, 21 October 1999, 23 November 1999, and 14 January 2000 noted radar brigades in the Beijing and Guangzhou MRAFs.

⁹⁰² Lin Hu, pp. 26-27.

- Operations and Education Division (*zuozhan jiaoyuchu*)
- Aeronautical Engineering Division (*hangkong gongchengchu*)
- Civil Aviation Division (*minhangchu*)
- Intelligence Office (*qingbaoke*)
- Supply Office (*gongyingke*)

On 11 November 1949, the CMC abolished the Aviation Bureau and formally established the PLAAF, using the Fourth Field Army's 14th *bingtuan* as its core.⁹⁰³ The first commander was Liu Yalou, and the first political commissar was Xiao Hua. Initially, HqAF only had three first-level administrative departments – Headquarters, Political, and Logistics. By the end of the first year, however, HqAF expanded to six first-level administrative departments – headquarters, political, training, engineering, logistics, and cadre/personnel.

Figure 9.1 PLAAF Headquarters, November 1949 – May 1953



The PLAAF Party Committee was established in July 1950. The HqAF organization from November 1949 - May 1953 is shown in Figure 9.1 above:⁹⁰⁴

⁹⁰³ Ibid. pp. 26-27.

⁹⁰⁴

In May 1955, the PLA and PLAAF restructured the existing military regions, as discussed in the books' introduction. In addition to realigning the MRAFs, the HqAF organization was restructured to include eleven first-level departments plus a Military Law Division as shown in Figure 9.2 below:⁹⁰⁵

Headquarters Department (*silingbu*): Operations Department (*zuozhanbu*); Recce Division (*zhenchachu*); Communications Division (*tongxinchu*); Air Traffic Control Division (*hangxingchu*); Formation Division (*duiliechu*); Confidential Division (*jiyaochu*); Administrative Division (*guanlichu*).

Political Department (*zhengzhibu*): Party Affairs Department (*zuzhibu*); Propaganda Department (*xuanchuanbu*); Security Department (*baoweibu*); Liaison Department (*lianluobu*); Directly Subordinate Political Division (*zhizhengchu*); Secretariat Division (*mishuchu*).

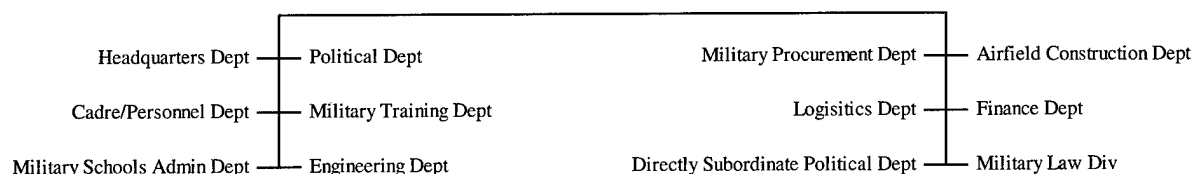
Training Department (*xunlianbu*): Training Division (*xunlianchu*); Regulations Division (*tiaolingchu*); Schools Administrative Division (*xuexiao guanlichu*); Editing & Translation Division (*bianyichu*).

Engineering Department (*gongchengbu*): Aircraft Maintenance Division (*jiwuchu*); Field Maintenance Division (*waichangchu*); Procurement Division (*dinghuochu*); Repair Division (*xiulichu*); Equipment Division (*qicaichu*); Special Equipment Division (*teshechu*); Armament Division (*junxiechu*).

Logistics Department (*houqinbu*): General Office (*bangongshi*); Political Department (*zhengzhibu*); Supply Department (*gongyingbu*); Health Department (*weishengbu*); Fuels Division (*youliao chu*); Finance Division (*caiwuchu*); Airfield Construction Division (*jichang jianshechu*); Barracks Management Division (*yingfang guanlichu*); Transportation Division (*yunshuchu*); Armament Division (*junxiechu*).

Cadre/Personnel Department (*ganbubu*): Military Cadre Division (*junshi ganbuchu*); Political Cadre Division (*zhengzhi ganbuchu*); School Cadre Division (*xuexiao ganbuchu*); Logistics Cadre Division (*houqin ganbuchu*); Secretariat Division (*mishuchu*).

⁹⁰⁵ **Headquarters Department** (*silingbu*); Political Department (*zhengzhibu*); Cadre/Personnel Department (*ganbubu*); Military Training Department (*junshi xunlianbu*); Military Schools Administrative Department (*junshi xuexiao guanlibu*); Engineering Department (*gongchengbu*); Military Procurement Department (*junshi dinghuobu*); Airfield Construction Department (*xiujianbu*); Logistics Department (*houqinbu*); Finance Department (*caiwubu*); Directly Subordinate Political Department (*zhishu zhengzhibu*); Military Law Division (*junfachu*).

Figure 9.2 PLAAF Headquarters, May 1955 - 1965

PLA Air Defense Force: 1949 – 1957. Between April 1949 and October 1950, the CMC began organizing the Army's AAA, searchlight, and radar battalions and regiments into an air defense structure that could protect China's major cities from Nationalist air bombardments. Garrison and air defense headquarters were created in Beijing, Shanghai, and Nanjing.⁹⁰⁶ As more cities were liberated, the PLA's eight AAA regiments became responsible for the air defense mission of these cities. By the end of 1949, there were sixteen AAA regiments, located in Shenyang, Anshan, Fushun, Beijing, Shanghai, Nanjing, Qishuyan, Wuhan, and Changsha.

On 23 October 1950, the PLA Air Defense Headquarters (*fangkong silingbu*) was formally established with Zhou Shidi as the commander and Zhong Chibing as the political commissar. At that time, there were two AAA divisions, sixteen AAA regiments, one searchlight regiment, two radar battalions, and one aircraft observation battalion (*duikong jianshi ying*). Shortly thereafter, there were four MR air defense headquarters (Huadong, Huabei, Dongbei, and Zhongnan). In addition, command organizations for the Xinan MR Air Defense Division (*fangkongchu*), the Andong and Xiaofengman Air Defense Headquarters, the Zhejiang and Fujian Air Defense Divisions, and the Nanjing, Tianjin, Wuhan, and Nanchang Air Defense Command Posts (*fangkong zhihuisuo*) were formed.

In March 1955, Yang Chengwu became the Air Defense Troops (*fangkong budui*) commander. In August 1955, the PLA Air Defense Troops became the PLA Air Defense Force (ADF/ *fangkongjun*) and was designated a service (*junzhong*) equivalent to the Air Force and Navy. In May 1957, the ADF and PLAAF merged under the Air Force's leadership. Following their merger, the new PLAAF leadership incorporated members of the PLAAF and ADF as follows:

- The command organization and troops of the original ADF's AAA troops, searchlight troops, and aircraft reporting/intelligence troops were kept in tact; and
- All PLAAF and ADF Command Posts were merged into a unified Air Defense Operations Command Post (*fangkong zuozhan zhihuisuo*).

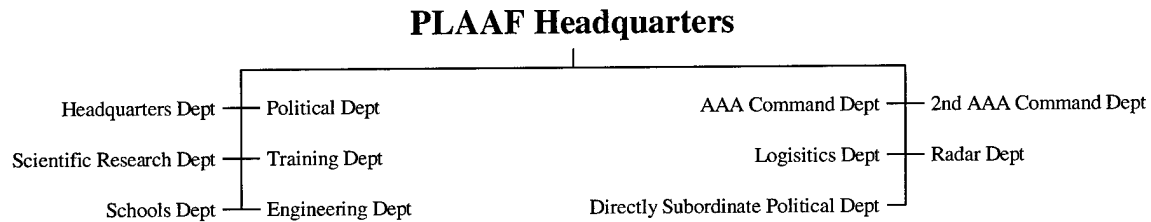
⁹⁰⁶ The information on the PLA Air Defense Force is taken from Allen, 1991, Section 2.

Upon merging, the new PLAAF leadership incorporated members of the PLAAF and ADF. The commander (Liu Yalou), political commissar (Wu Faxian), and five of the seven deputy commanders came from the PLAAF. The remaining two deputy commanders (Cheng Jun and Tan Jiashu) came from the Air Defense Force.

Administrative Organization after May 1957. The May 1955 HqAF reorganization creating eleven first-level administrative departments reflected the three general departments' (GSD, GPD, and GLD) requirements. Over the next decade, several new first-level departments were added, merged, or downgraded. When the PLAAF and ADF merged, the AAA Command Department (*gaoshepaobing zhihuibu*), the Radar Department (*leidabingbu*), and the Searchlight Department (*tanzhaodengbingbu*) were added. In June 1957, the Finance Department (*caiwubu*) was incorporated into the Logistics Department, and in September 1957, the Headquarters Department's Communications Division (*tongxinchu*) became a first-level communications department (*tongxinbu*). From 1958-1965, two first-level departments were added and five merged.⁹⁰⁷ As a result of these changes from 1955-1965, HqAF had the following eleven first-level administrative departments during the height of the Cultural Revolution, as shown in Figure 9.3:⁹⁰⁸

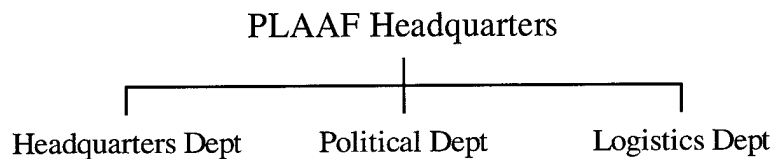
⁹⁰⁷ The five first-level departments that merged were as follows: the Procurement Department merged into the Engineering Department; the Airfield Construction Department merged into the Logistics Department; the Searchlight Department merged into the AAA Command Department; the Cadre/Personnel Department merged into the Political Department; and the Communications Department merged into the Headquarters Department. The first one added was the Military Scientific Research Department (*junshi kexue yanjiubu/keyanbu*). The Technical Department (*jishubu*) was added to take care of SAMs, but this department was later merged with the AAA Command Department. In June 1966, they again split, and the 2nd AAA Command Department (*dier gaoshepaobing zhihuibu*) was established.

⁹⁰⁸ Headquarters Department (*silingbu*); Political Department (*zhengzhibu*); Logistics Department (*houqinbu*); Engineering Department (*gongchengbu*); Training Department (*junxunbu*); Schools Department (*junxiaobu*); Scientific Research Department (*keyanbu*); AAA Command Department (*gaoshepaobing zhihuibu*); 2nd AAA Command Department (*dier gaoshepaobing zhihuibu*); Radar Department (*leidabingbu*); Directly Subordinate Political Department (*zhishu zhengzhibu*).

Figure 9.3 PLAAF Headquarters, 1965 - 1969

When the PLA carried out a reduction in force in 1969, HqAF followed suit and reduced its organization to the three core first-level departments shown in Figure 9.4 below.

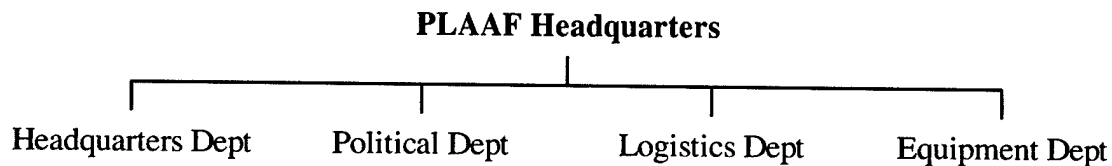
As a result of this consolidation, the PLAAF changed the status of the following departments:

Figure 9.4 PLAAF Headquarters, 1969 - 1976

- The Training and Schools Departments were merged into the Training Department and placed under the Headquarters Department;
- The AAA Command Department, 2nd AAA Command Department, Radar Department, and Scientific Research Department were reduced in size and subordinated to the Headquarters Department;
- The Engineering Department and Directly Subordinate Political Department were abolished;
- The Engineering Department's administrative and field maintenance work became the Headquarters Department's responsibility; and
- The Engineering Department's repair and procurement work became the Logistics Department's responsibility.

Abolishing the Engineering Department created problems for maintenance support, so the Engineering Department was reactivated as the Aeronautical Engineering Department (*hangkong gongchengbu*) in May 1976 as the fourth first-level administrative department. With the exception of changing the Aeronautical Engineering Department to the Equipment-Technical Department in November 1992 and moving some of the second-level departments from within the Headquarters and Logistics Departments to the successor Equipment Department in 1998 to conform with the newly-established General Armament Department (GAD), the administrative organizational structure, as shown in Figure 9.5, has remained fairly stable since 1976.

Figure 9.5 PLAAF Headquarters, 1976 -



One significant change was the creation sometime during the 1990s of the Electronics Countermeasures Department (*dianzi duikangbu*) as a second-level department under the Headquarters Department to manage electronic countermeasures and information warfare. The organizational history for the MRAFs, air corps, command posts, bases, air divisions, and independent aviation regiments is discussed below.

HEADQUARTERS PLAAF TODAY

Headquarters Air Force is the highest command authority and is responsible for policy, training, and equipping the PLAAF.⁹⁰⁹ Operational command is delegated to the MR and MRAF headquarters, where the MR commander is responsible for combined operations, and the MRAF commander, who is also an MR deputy commander, is responsible for flight operations within the MR.⁹¹⁰ In terms of responsibility, the PLAAF makes a distinction between functional (*yewu*) and administrative (*xingzheng*) control. For example, HqAF maintains functional control

⁹⁰⁹ The information concerning the responsibilities of HqAF's Headquarters, Logistics, and Equipment Departments is taken from *Ibid.*, pp. 145-147.

⁹¹⁰ The seven MRAF headquarters are not co-located with the MR headquarters, and in most cases the Logistic Department is not in the same location as the Headquarters, Political, and Equipment-Technical Department, which are generally co-located.

for the planning, budgeting, and requirements for schools and academies, while the MRAF's provide the facilities and have administrative responsibilities for running them.

Key command personnel at HqAF include a commander (*silingyuan*), political commissar (*zhengwei*), four deputy commanders (*fusilingyuan*), two deputy political commissars (*fuzhengwei*), and directors for the Political, Logistics, and Equipment Departments. Even though the four first-level departments are shown as equivalents on an organizational chart, the Headquarters and Political Departments are considered to be slightly higher than the Logistics and Equipment Departments in the protocol hierarchy.

HqAF first-level department directors are equivalent to PLA army commanders (*junzhang*) and the deputy directors are equivalent to deputy army commanders.⁹¹¹ HqAF second-level department/bureau directors are equivalent to PLA division commanders (*shizhang*). HqAF division (*chu*) directors are equivalent to PLA regiment commanders (*tuanzhang*). At the MRAF-level, first-level department directors are equivalent to deputy army commanders, second-level divisions directors are equivalent to deputy division commanders (*fushizhang*), and their subordinate office directors are equivalent to deputy regiment commanders (*futuanzhang*).

HqAF's Headquarters Department is similar to the General Staff Department and is responsible for the following:⁹¹²

- Manage the organizational structure, plans, deployment, transfer, battlefield development, and operational control of the PLAAF operational and support troops;
- Establish departments for and manage operations, intelligence, communications, training, radar, research, and weather support.

HqAF's Political Department is similar to the General Political Department and is responsible for the PLAAF's political work. The PLAAF has three organizations that accomplish political work: Party Committees (*dang weiyuanhui/dangwei*), political commissars (*zhengwei*), and political departments (*zhengzhibu*). Political work includes political education, personnel issues, and public affairs (propaganda).⁹¹³ The PLAAF's Discipline Inspection Commission (*jilu jiancha weiyuanhui*), which the senior deputy political commissar chairs,

⁹¹¹ The term *jun* is translated as army for the ground forces and as an air corps for the PLAAF. The only exception is the PLAAF's 15th Airborne Army (*kong 15 jun*).

⁹¹² The information concerning the responsibilities of HqAF's Headquarters, Logistics, and Equipment-Technical Departments is taken from *Kongjun da cidian*, pp. 145-147.

⁹¹³ Information about the PLAAF's political system was generated from a briefing for the author provided by the PLAAF Political Department in 1988 prior to then-political commissar Zhu Guang's visit to the United States. The author also escorted General Zhu on the visit.

works directly for the PLAAF's Party Committee and the CMC's Discipline Inspection Commission. This commission is responsible for major disciplinary problems. In 1989, the PLAAF's political system had about 30,000 people engaged in political work, equating to approximately six percent of the total force.

Major decisions affecting an Air Force unit require the coordination of the unit's Party Committee, which is the nucleus of unified leadership. At HqAF, the political commissar is the secretary of the Air Force Party Committee and the commander is the deputy secretary. All four deputy commanders, the two deputy political commissars, the chief of staff, four deputy chiefs of staff, and the three other first-level department directors serve as members of the Air Force Party Committee Standing Committee (*dangwei changwei*).

The Logistics Department is similar to the General Logistics Department and, as the PLAAF's largest department, is responsible for the following:

- Organize rear echelon bases;
- Manage the budget;
- Manage the PLAAF's quartermaster work, health, airfield and barracks construction, air materiel, fuel, and transportation; and
- Organize logistics training and research.

The Equipment Department is responsible for managing the following:

- Engineering support and maintenance for air force aviation equipment;
- Repair and overhaul depots for aviation equipment;
- Procurement of aviation equipment from domestic and foreign sources;
- PLAAF representatives at defense factories;
- The R&D, testing, and finalization of equipment;
- The plans, distribution, funds allocation, and maintenance for weapons and equipment; and
- Maintenance training and research.

Operational Structure

PLAAF Operational Areas. Since the PLA was formally established from the components of the Red Army in the late 1940s, China has been divided into various operational areas to control the ground, air, and naval components of the armed forces. Over the past fifty years, some PLAAF command organizations (MRAF, air corps, command posts, and bases) have been downgraded, upgraded, or abolished as the PLAAF consolidated and reorganized its regional control capabilities.

Although the PLAAF is subordinate to the PLA, the uneven growth of the Air Force led to operational areas that were sometimes different than the ground forces' operational areas

described in the introduction to this book. This situation lasted until the 1985 military region consolidation, when the PLAAF operational boundaries finally matched those of the ground forces. While most of the PLAAF's aviation and air defense units are subordinate to an MRAF, air corps, command post, or base, some of the PLAAF's aviation and air defense units are directly subordinate (*zhishu budui*) to PLAAF Headquarters.

Between August 1950 and May 1952, the six PLAAF Aviation Divisions that had been created in the ground force MRs became MRAF headquarters.⁹¹⁴ The list below shows the name and location of the MRAF headquarters once they were established.⁹¹⁵

- Dongbei – Shenyang
- Huabei – Beijing
- Xibei – Lanzhou
- Huadong – Nanjing
- Zhongnan – Wuhan (moved to Guangzhou in May 1955)
- Xinan – Chongqing (moved to Chengdu in 1950 and Wuhan in May 1955)

Although the CMC realigned the ground force operational boundaries into twelve MRs in February 1955, the PLAAF did not follow suit. In May 1955, the six MRAFs were renamed. While four of the MRAF headquarters remained in the same location, two of them moved. The Zhongnan MRAF in Wuhan moved to Guangzhou as the Guangzhou MRAF, and the Xinan MRAF in Chengdu moved to Wuhan to become the Wuhan MRAF. The MRAF headquarters changes are shown below:

- Dongbei MRAF became the Shenyang MRAF
- Huabei MRAF became the Beijing MRAF
- Xibei MRAF became the Lanzhou MRAF
- Huadong MRAF became the Nanjing MRAF
- Zhongnan MRAF became the Guangzhou MRAF
- Xinan MRAF became the Wuhan MRAF

During the 1950s and 1960s, the PLAAF created thirteen air corps and several command posts to control aviation and air defense units within geographical areas that may or may not have been within an existing MRAF. During the Cultural Revolution, many PLAAF command organizations ceased to exist and were reestablished during the late 1970s. In addition, as the

⁹¹⁴ Lin Hu, pp. 26-27.

⁹¹⁵ See Yao Jun, p. 656; and Lin Hu, pp. 26-27.

PLAAF expanded and realigned its operational areas with those of the ground forces, several of the air corps replaced MRAF headquarters, were abolished, or were downgraded to a command post. The key point is that these command organizations are composed of staff members only. When they moved, they did not necessarily have organic aviation and air defense units that moved with them. As these command organizations were moved around to replace existing organizations or establish new command organizations, they then took control of aviation and air defense units that already existed in the command area. Today, only five air corps remain active – 1st/Changchun, 7th/Nanning, 8th/Fuzhou, 9th/Wulumuqi, 10th/Datong. Beginning in 1993, the PLAAF also changed the names of six of its seven existing command posts to bases – Dalian, Tangshan, Xian, Shanghai, Wuhan, and Kunming. Apparently the Lhasa Command Post did not convert to a base.⁹¹⁶

Trying to track individual command elements is not always easy. There are several instances where some air corps were formed, moved to another location to form the basis for an MRAF headquarters, abolished, downgraded to a command post, or reestablished later in a new location. The following two tables and explanation discuss PLAAF operational organizational changes that have taken place within the Military Regions since 1949.⁹¹⁷ Table 9.5 shows when each of the MRAFs, air corps, command posts, and air divisions were established (See Appendix G for the history of each organization), and shows the current status of the MRAFs, air corps, command posts, and bases. An open source list of current air divisions and their locations is not available.

Table 9.5 PLAAF Command Organization and Operational Unit History

MRAFs	Air Corps	Command Posts	Air Divisions
1955: Beijing Nanjing Lanzhou Wuhan Shenyang Guangzhou	1951: 1 st	1955: Wuhan	1950: 7 (2 nd – 9 th)
	1951: 2 nd	1960: Fuzhou	1951: 16 (10 th – 25 th)
	1951: 3 rd	1962: Lhasa, Hetian	1952: 3 (26 th – 28 th)
	1952: 4 th	1965: Chengdu	1954: 1 (29 th)
	1952: 5 th	1976: Tangshan	1960: 4 (30 th to 33 rd)
	1956: 6 th	1978: Kunming, Zhangzhou	1963: 1 (34 th)
1958: Fuzhou	1962: 7 th	1979 Wulumuqi	1965: 2 (35 th – 36 th)
1965: Jinan	1962: 8 th	1985: Xian, Dalian,	1966: 1 (37 th)

⁹¹⁶ Directory of PRC Military Personalities, October 1999, pp. 46.

⁹¹⁷ Unless specified, the information in this section is taken from Allen; *Dangdai Zhongguo Kongjun*; and Lin Hu.

MRAFs	Air Corps	Command Posts	Air Divisions
		Shanghai	
1985: Chengdu	1962: 8 th		1967: 2 (38 th to 3
	1964: 9 th		1969: 7 (40 th – 46 th)
	1969: 11 th		1970: 1 (47 th)
	1969: 12 th		1971: 3 (48 th – 50 th)
	1970: 13 th		

Air Divisions and Independent Regiments. From October 1950 to early 1954, the PLAAF deployed a total of 3,000 aircraft in twenty-eight new air divisions composed of seventy regiments, plus five independent regiments (three reconnaissance, one bomber, and one transport). The air divisions consisted of fighters, bombers, transports, ground attack, and reconnaissance aircraft.⁹¹⁸ Prior to 1953, all of the divisions only had two regiments. Beginning in 1953, however, the PLAAF started adding a third regiment to each of the previous divisions.

The PLAAF arranged these deployments into seven groups of air divisions and independent regiments. Based on an agreement between China and the Soviet Union, a Soviet Air Force air division arrived in northeast China in August 1950 to assist with China's air defense. Between October and December 1950, the Soviet military ferried new aircraft to China for the PLAAF and deployed thirteen Soviet air divisions (ten fighter, two ground attack, and one bomber) to four of China's military regions – Dongbei, Huabei, Huadong, and Zhongnan – to

⁹¹⁸ Yao Jun, pp. 163-164. The first batch of aircraft was a hodge podge of existing aircraft. The second batch was delivered in November 1950 and created the 2nd, 3rd, and 4th brigades, which were then upgraded to divisions. The third batch of aircraft were delivered between November and December 1950 and created the 5th ground attack, 6th, 7th, 8th, and 9th fighter and 8th bomber divisions. The fourth batch of aircraft were delivered between December 1950 and May 1951 and created the 10th bomber, 11th ground attack, 13th transport, and 12th, 14th, 15th, 16th, 17th, and 18th fighter divisions. The fifth batch of aircraft were delivered between November 1951 and May 1952 and created the 19th, 21st, and 24th fighter, 20th, 23rd, and 25th bomber, and 22nd ground attack divisions and the 1st and 2nd independent reconnaissance regiments. The sixth batch of aircraft were delivered between December 1952 and March 1953 and created the 26th and 27th fighter and 28th ground attack divisions and the 3rd independent transport and 4th independent bomber regiments. The seventh batch of aircraft were delivered between the end of 1953 and early 1954 and created the 29th fighter division and the 5th independent reconnaissance regiment. Naval Aviation created six air divisions and five independent regiments between 1952-1955 and added three more air divisions during the 1960s. Today, Naval Aviation has eight air divisions and twenty-seven regiments divided among twenty-five airfields in the three fleets.

provide an air defense role and assist with the PLAAF's training. In addition, a Soviet combined aviation group arrived in Shanghai, Nanjing, and Xuzhou in February 1950 to help with China's air defense. The Soviets began returning home in July 1951.⁹¹⁹ It is not clear when the last Soviet forces left China.

From January 1954 to 1971, the PLAAF created an additional twenty-two air divisions throughout China. The introduction of new aircraft such as the A-5 ground attack aircraft and the B-5 and B-6 bombers also influenced the formation of new combat units.⁹²⁰ While some units merely upgraded to the new aircraft, other units were formed using the new aircraft as their basis. The formation of these fifty divisions and five independent regiments is shown in Appendix G.⁹²¹ Although these divisions were originally established at one location, many of the early divisions relocated several times as the PLAAF expanded to meet operational needs, especially during the late 1950s opposite Taiwan and the 1960s during the Vietnam War.

Since the 1950s, the standard table of organization and equipment (TOE) for a fighter division has been eighty aircraft (including eight trainers) and 120 pilots – a 1:1.5 ratio – with each fighter regiment having twenty-four aircraft and forty pilots.⁹²² The TOE for a bomber division is fifty-four aircraft and ninety crews (*jizu*) – a 1:1.7 ratio – with each regiment having eighteen aircraft and thirty crews. When the PLAAF began forming its first air divisions, most divisions had two regiments, but a few divisions had three regiments, stationed at 1-2 airfields. By 1953, the PLAAF began upgrading all of its divisions to three regiments. Each regiment has 3-4 subordinate groups, which, in turn, are divided into 3-4 squadrons. One confusing event that occurred between 1964 and 1970, was that the PLAAF changed the name of each regiment to a group without changing the organizational structure. Thus, the 24th air division's 70th air regiment in 1963 was renamed the 70th group in 1964.⁹²³ In 1970, the regiment name was re-instituted.

⁹¹⁹ Yao Jun, p. 650, and *Dangdai Zhongguo Kongjun*, p. 652.

⁹²⁰ The PLAAF began receiving the A-5 in December 1969, the B-5 in 1967 (even though other PLAAF units had received Soviet-built IL-28s earlier), and the B-6 in 1976. See Yao Jun, pp. 260, 413, 415, 664.

⁹²¹ The PLAAF histories provide lots of detail about the formation of the first 28 divisions, but give virtually no information about the remaining 22 divisions. Information in these tables is compiled from Yao Jun, *Dangdai Zhongguo Kongjun*; and Lin Hu.

⁹²² Yao Jun, p. 293.

⁹²³ The Air Force uses the "rule of three" to designate its air divisions and regiments. In order to determine a division's subordinate regiments, multiply the division designator times three, then subtract one and two. For example, the 10th air division has the 30th (10 x 3) regiment, 29th (10 x 3 - 1) regiment, and 28th (10 x 30 - 2 = 28) regiment. Each regiment has three

According to a 1999 Department of Defense report, the PLAAF's combat aircraft are currently organized into some thirty air divisions, plus about 150 transport aircraft organized in two air divisions, compared to the fifty total air divisions that existed into the late 1980s.⁹²⁴ A 14 June 2000 *Jane's Defence Weekly* report stated that the PLAAF currently consists of thirty-three divisions, including twenty-seven fighter, four bomber, and two transport divisions.⁹²⁵ In

groups numbered the 1st, 2nd, and 3rd. In addition, the PLA uses five-digit cover designators (*budui daihao*) to protect the identify of its units. These cover designators are used on stationery letterhead, in newspaper articles, and on signs at the entrance to military facilities. These designators are commonly called military unit cover designators (MUCD) in the West. The PLAAF's MUCDs are in the 39XXX, 86XXX, and 87XXX blocks. *Kongjun da cidian*, pp. 145.

⁹²⁴ "The Security Situation in the Taiwan Strait," Report submitted by Secretary of Defense William Cohen to the US Senate as directed by the FY99 Appropriations Bill, 17 February 1999. Discussions with PLAAF officials indicate that this number (32 divisions) is too low, but they did not specify the total number. In addition, the number of 4500 aircraft is probably too high. According to a March 1997 Hong Kong report, US reconnaissance satellites discovered in June 1993 that China had gathered over 1,000 combat aircraft at an airfield (Rugao) in central China, which turned out to be an exceptionally large aircraft depot to accommodate retired planes. Japan's Research for Peace and Security (RIPS), *Asian Security: 1998-1999* (page 108) provides a figure of 3,740 combat aircraft, which is a reduction of 1,230 from 1997. Based on the author's analysis, the majority of the aircraft taken out of the inventory are the older F-6s, which were last produced in 1979. The actual figure is probably somewhere around 3,500 aircraft in the active inventory today. An air division can have one or more air regiments per airfield, with each airfield assigned a field station for logistics support. Although a division can have more than one type of aircraft (i.e., F-7s and F-8s), each regiment typically has the same type of aircraft. The table of organization and equipment (TO&E) for a typical air regiment consists of from 25-32 aircraft, but may actually have more or less assigned. The regiment is the basic organization for training and operations. Each regiment has three flying groups and one aircraft maintenance group. Each flying group is further divided into three squadrons. The division has about 1.5-2.0 pilots per aircraft. Although the pilots are assigned to squadrons, each with three to five pilots, the aircraft are assigned to the regiment as a whole, not just to the squadrons. Each pilot, however, normally only flies one to three airframes, so they become familiar with each aircraft's handling capabilities. The PLA established age limits for pilots in the 1980s: fighter and ground-attack pilots, 43-45 years; bomber pilots, 48-50 years; transport pilots, 55 years; helicopter pilots, 47-50 years.

⁹²⁵ Robert Sae-Liu, "PLAAF Fixed-Wing Fleet Cut In Major Restructuring," *Jane's Defence Weekly*, 14 June 2000, p. 41. The article says the PLAAF had 43 divisions in 1997 when Jiang Zemin announced a force reduction. In 1998, there were 39 divisions, including 31 fighter, five bomber, and two transport divisions. It is not sure whether the 38th bomber division

June 2000, the Department of Defense reported that the PLAAF and Naval Aviation combined number over 400,000 personnel, 4,300 tactical fighters, 1,000 bomber and close air support aircraft, and 650 transport aircraft.⁹²⁶

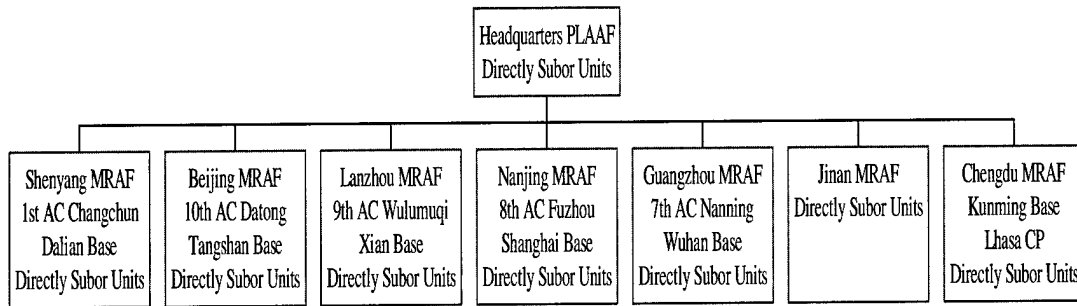
Controlling the New Units. As the PLAAF rapidly increased the number of its air divisions and independent regiments, it also created command organizations to control the aircraft. Besides establishing MRAFs to control large geographic areas that were somewhat aligned with the ground force regions, the PLAAF also established thirteen air corps to control one or more air divisions within the MRAFs, and several command posts to control aircraft and air defense assets deployed to or operating in a specific area. As the PLAAF created its first twenty-eight air divisions between 1950 and 1954 to deal primarily with the Korean War, it also established five air corps to control those assets. One more air corps was created opposite Taiwan in the mid-1950s.

While the PLAAF deployed sixteen new air divisions during the 1960s in response to the Sino-Indian border conflict, the Vietnam War, and the new Soviet threat, it also formed six air corps, and two command posts. During the 1970s, the PLAAF added only three new air divisions and one air corps. As the PLA reorganized during the 1980s, all but five of the air corps were either abolished or downgraded to command posts. One of the primary reasons command posts replaced air corps was to eliminate unnecessary administrative functions and to make the command post an operational (not an administrative) organization. As a result, the Political Department, Logistics Department, and Aeronautical Engineering Departments were all reduced to a Political Division, Logistics Division, and Maintenance Division, and placed directly under the Headquarters Department. Some command posts, such as Xian and Wuhan, did not have any directly subordinate aviation units, so they did not have a Maintenance Division. In addition, some of the administrative divisions (*chu*) present at the air corps or MRAF headquarters were eliminated at the command post. The appropriate MRAF headquarters took over responsibility for these administrative functions. Beginning in 1993, all of the command posts, with the exception of Lhasa, were further reorganized as bases, as seen in Figure 9.6.⁹²⁷ For all practical purposes, a command post and base are identical, except that a command post is equal to an air corps, while a base is slightly lower (the commander is equal to a deputy air corp commander).

at Laiyang, Guangzhou MRAF, is still active or not. If so, that would make 34 active divisions today. The article says the PLAAF has 16 active air defense (AAA/SAM) divisions.

⁹²⁶ Secretary of Defense, "Report on the Current and Future Military Strategy of the People's Republic of China," Report to Congress Pursuant to the FY2000 National Defense Authorization Act, 23 June 2000.

⁹²⁷ *Kongjun da cidian*, p. 147.

Figure 9.7 Current PLAAF Command Organization Status by MRAF

Organizational Changes Affecting Pilot Training

Since the late 1980s, the PLAAF has been involved in two complementary organizational changes that have resulted in more realistic flight training. First, in 1987 the PLAAF established a Flight Test and Training Center at Cangzhou airfield near Tianjin. This center has three primary missions: to test new aircraft under development by the aviation ministry; to train the initial cadre of pilots in new type aircraft before the aircraft are deployed to an operational base for the first time; and to devise new air combat tactics.⁹²⁸

According to a 2 April 1997 *Liberation Army Daily* articles, the Center has obtained some initial results in important combat study areas, such as maneuverable combat, air attack, fighting for air supremacy, and night attack and defense.⁹²⁹ As a result of these studies, the PLAAF has adopted a new training syllabus characterized by adaptability to combat situations under future high-tech conditions.

⁹²⁸ The author visited the Test and Training Center in 1989.

⁹²⁹ Sun Maoqing, "PLA Commander on Modernizing Air Force," *Beijing Liaowang*, 14 April 1997, in FBIS-CHI-97-099, 14 April 1997; and Zhang Nongke and Zhang Jinyu, "'Grindstone' Confronts 'Iron Wings' in Blue Sky: Air Force Forms Unified 'Blue Army' Unit for First Time To Confront Airmen Units in Rotation," *Jiefangjun bao*, 28 April 1997, in FBIS-CHI-97-102, 28 April 1998.

The Training Center also established a "Blue Army" aggressor unit located nearby to simulate offensive and defensive operations against the "Red Army."⁹³⁰ The aggressor aircraft, mostly F-7s and F-8s, engage in exercises with local units, employing dissimilar aircraft air intercepts utilizing evasive maneuvers.⁹³¹ The tactics developed at the training base and through the "Blue Army" are now being moved to the unit-level, where several units have begun to turn these new combat theories and concepts into live-ammunition exercises.

Second, in 1958 the PLAAF built a large center for testing its AAMs and SAMs in the Gobi Desert near Dingxin, Gansu Province.⁹³² During the mid-1990s, the PLAAF began

⁹³⁰ In February 1987, the PLAAF Flight Test and Training Center (*kongjun feixing shiyan xunlian zhongxin*) was established in Cangzhou (AKA Cangxian), Hebei Province, replacing the 11th Aviation School. During the 1980s, the PLAAF did not believe that it was receiving timely and accurate testing data from the aviation ministry during the ministry's development and testing of new aircraft at the Xian Yanliang flight test center. Therefore, one of the Center's mission was to conduct independent testing. There is very little open source information on this mission, though.

⁹³¹ Interviews with PLA and US government officials.

⁹³² In 1958, the CMC authorized construction of the Northwest Comprehensive Missile Test Base (NCMTB) at Shuangchengzi, Gansu Province, to conduct testing of surface-to-surface, surface-to-air, and air-to-air missiles. NDSTC was the controlling authority. When construction was completed in 1960, the NCMTB apparently consisted of four basic entities – the base with control organizations for SSMs, SAMs, and AAMs, and three separate test ranges. Between the mid-1960s and summer of 1970, a new launch site was constructed for the preliminary stage tests of medium and intermediate range surface-to-surface missiles and launch tests for intercontinental ballistic missiles. In July 1970, the AAM and the SAM test organizations (departments) were separated from the SSM organizational structure and placed separately under the PLAAF to form two independent SAM test bases, leaving the NCMTB as a specialized SSM facility only. Apparently, these two organizations moved from Shuangchengzi to nearby Dingxin airfield. The director for the SAM organization and test range was Zhou Shuren and Song Dece was the political commissar. The AAM organization and range were placed under Hu Jia as the director and Cai Jianqiao as the political commissar. Over the succeeding thirty years, the AAM and SAM ranges received advanced tracking and control equipment. At some point in the late 1980s or early 1990s, the PLAAF upgraded the facilities at Dingxin to accommodate a Tactical Training Center associated with the Flight Training Center at Cangzhou, which was established in 1987. From the descriptions given of the facilities at Dingxin, it appears that a separate range was also created for this activity. NDSTC retained authority for SSM tests at Shuangchengzi, which was used as the primary launch site for ballistic missiles from the early 1960s. In 1980, the Shuangchengzi facility changed its name to the Jiuquan Space Center and is one of the major

expanding this base to include a large tactics training center, where multiple PLAAF units could practice the tactics developed at Cangzhou and tested in individual units throughout the force. The training base has a sophisticated command and control center, air and ground tactical training ranges, simulated runways built to scale, a SAM base, AAA positions, radars, radar support vehicles, simulated enemy command posts, ammunition depots, and oil depots, which look real. A large number of simulated tanks are also deployed in combat positions.⁹³³ In addition, the training center includes a mock up of Chingchuankang (CCK) airbase in central Taiwan.⁹³⁴

SUMMARY

With the exception of downgrading the command posts to bases in 1993, the PLAAF's operational command structure has remained fairly constant since 1985. While the re-subordination of the Equipment and Scientific Research Departments under the Equipment Department in 1998 was significant on paper, the officers merely changed the nameplate on their office door in the same building. They are still performing the same tasks as before, just under a different first-level department.

The reduction in force from fifty to thirty-three air divisions over the past decade is significant in that the PLAAF has been able to retire many of its F-6s, all of which were built more than twenty years ago. This consolidation has saved the PLAAF money on maintenance costs and has allowed it to focus on other reforms, including logistics for a smaller and more mobile force. As the PLAAF acquires new weapons systems (Su-27/J-11, Su-30s, Il-76s, J-10, and S-300 SAMs), there will be further changes in doctrine and the way the PLAAF supports a more mobile force.

launch sites for ballistic missiles and space launch vehicles, including military reconnaissance satellites. Sources: *China Today: Defence Science and Technology*, National Defence Industry Press, Beijing, 1993, Volumes I & II, pp. 38-39, 281-288, 459-461, 492-493; Robert S. Norris, Andrew S. Burrow, and Richard W. Fieldhouse, *Nuclear Weapons Databook: British, French, and Chinese Nuclear Weapons*, Boulder, Westview Press, 1994, Volume V, pp. 338-341; "Gobi Air Force Missile Base Revealed," *Kuang chiao ching*, 16 November 1998, pp. 80-91, in FBIS-CHI-98-341, 7 December 1998; Zhang Nongke and Zhang Jinyu, "Air Force Builds Modern, Comprehensive Tactical Training Base," *Jiefangjun bao*, 28 October 1996, in FBIS-CHI-96-228, 26 November 1996; "Gobi Air Force Missile Base Revealed," *Kuang chiao ching*, 16 November 1998 pp. 80-91, in FBIS-CHI-98-341, 7 December 1998; and *Dangdai Zhongguo Kongjun*, p. 311.

⁹³³ Zhang Nongke and Zhang Jinyu, "Air Force Builds Modern, Comprehensive Tactical Training Base," *Jiefangjun bao*, 28 October 1996, in FBIS-CHI-96-228, 26 November 1996.

⁹³⁴ "China Builds Airport Copy," *Associated Press*, 28 April 1999.

Any future significant administrative and command organization changes will come from the PLAAF's relationship with the Army, such as promoting PLAAF officers into senior positions within the four general departments, and from unit-level changes and joint-training that lead to a better capability to conduct combat operations. While PLAAF officers are not likely to be moved into higher command positions in the near future, the unit-level changes are already taking place.

APPENDIX A. AIR FORCE LEADERS: 1949-2000

Commander

Liu Yalou
 Wu Faxian
 Ma Ning
 Zhang Tingfa
 Wang Hai
 Cao Shuangming
 Yu Zhenwu
 *Liu Shunyao

Deputy Commanders

Chang Qiankun
 Wang Bi
 Wang Bingzhang
 Liu Zhen
 Xu Shenji
 Cao Lihuai
 Cheng Jun
 Tan Jiashu
 Xue Shaoqing
 Zhang Tingfa
 Kuang Rennong
 Luo Yuanfa
 Zeng Guohua
 Zou Yan
 Zhang Jihui
 Wu Fushan
 He Tingyi
 Wang Dinglie
 Wang Hai
 Li Yongtai
 Yu Zhenwu
 Lin Hu
 Liu Zhitian
 Yang Zhenyu
 Jing Xuele

Liu Shunyao
 *Wu Guangyu
 Xin Dianfeng
 *Wang Liangwang
 Qiao Qingchen
 *Li Yongde
 *Ma Diansheng

*Xu Chengdong
 *Lin Wanhai

Political Commissar

Xiao Hua
 Wu Faxian
 Yu Lijin
 Wang Huiqiu
 Fu Chuanzuo
 Zhang Tingfa
 Gao Houliang
 Zhu Guang
 Ding Wenchang
 *Qiao Qingchen

**Deputy Political
Commissars**

Wang Bi
 Wu Faxian
 Yu Lijin
 Wang Huiqiu
 Gao Houliang
 Du Yufu
 Huang Liqing
 Kuang Fuzhao
 Liu Shichang
 Liu Zhao
 Gao Xingmin
 Xu Lefu
 Yang Yingchang
 Chen Qian

**Chief of Staff (Director,
Headquarters
Department)**

Wang Bingzhang
Zhang Tingfa
Liang Pu
Wang Dinglie
Ma Zhanmin
Yu Zemin
Xin Dianfeng
Xu Qiliang
*Zheng Shenxia

Source: *Zhongguo Kongjun* p. 34.

* Current position holder.

**Director, Political
Department**

Xiao Hua
Wu Faxian
Wang Huiqiu
Huang Yukun
Gao Houliang
Liu Shichang
Ye Songsheng
Bi Hao
Gao Xingmin
Ding Wenchang
Zhang Hanping
Xu Chengdong
*Deng Changyou

APPENDIX B. PLAAF COMMANDER BIOGRAPHIES

Liu Yalou (October 1949 - May 1965)

Liu Yalou was born in 1910 in Fujian province and died in 1965. He joined the Communist Party and the Red Army in 1929. He participated in the Long March and held successive political commissar and commander positions. He went to the Soviet Union in 1939 and studied until 1942. He fought with the Soviet Army against Germany until he returned to China in August 1945 and served in command positions in the northeast. In 1947, he became the commandant of the Northeast Flying School. In April 1949, he became commander of 4th Field Army's 14th *bingtuan*, which formed the basis of the PLAAF when it was formally founded in November 1949.

Wu Faxian (May 1965 - September 1971)

Wu Faxian was born in 1915 in Jiangxi province. He joined the Communist Party in 1930 and became part of the Red Army, serving primarily in political commissar positions. He participated in the Long March and served in the 8th Route Army. After switching from the Army to the Air Force in 1950, he held positions as director of the political department and concurrently deputy political commissar (1950-1957), political commissar (1957-1965), and commander (1965-1971). While serving as PLAAF commander, he simultaneously held the position of deputy chief of the general staff. He was a representative at the 2nd and 3rd National People's Congress, and was a member of the 9th Party Central Committee and member of the Politburo. During the Cultural Revolution, he was a key member of Minister of Defense Lin Biao's group. Wu was arrested immediately after Lin Biao's death in September 1971 and was finally sentenced in 1976 seventeen years imprisonment. Because of deep suspicions among other senior military and civilian leaders about the PLAAF's loyalties, the Air Force was immediately put in a stand-down for three months after Lin's death. These suspicions continued long after the stand-down ceased and are illustrated by the fact that the Air Force did not have a new commander until May 1971 and that none of the official PLAAF histories list any events for the intervening period.

No Commander (September 1971 - May 1973)

Ma Ning (May 1973 - April 1977)

Ma Ning was born in Henan province in 1922, joined the Communist Party in 1935, and served in successive command positions in the 8th Route Army and 2nd Field Army. He transferred from the Army to the PLAAF in 1949, and served as a bomber pilot before becoming deputy commander and commander of the 21st Air Division (Shanghai) until 1967, then became the deputy commander and commander of the 1st Air Corps in Changchun. He was apparently politically adroit during the Cultural Revolution. In 1968 he was on the Jilin Provincial Revolutionary Committee standing committee. From Changchun, he became deputy commander

of the Lanzhou Military Region Air Force. In May 1973, he became commander of the PLAAF. Ma's political savvy allowed him to become PLAAF commander before Zhang Tingfa, who had been a deputy commander before the Cultural Revolution. Ma was a representative at the 10th Party Congress, a member of the 10th Party Central Committee, and a representative at the 4th National People's Congress.

Zhang Tingfa (April 1977 - May 1985)

Zhang Tingfa was born in 1918 in Fujian province and joined the Communist Party in 1933. He served in successive Army positions, including the 8th Route Army, and participated in the Long March. In 1949, he served as a deputy Army corps commander, then as a PLAAF deputy chief of staff, chief of staff, deputy commander, and political commissar. He became PLAAF commander in April 1977. He was a representative at the 10th, 11th, 12th Party Congress, a member of the 10th, 11th, and 12th Party Central Committee and Politburo, and a representative at the 5th National People's Congress. As PLAAF commander, he was a member of the Central Military Commission and a member of the Standing Committee of the Party Central Committee's Politburo. He was replaced in May 1985 at the age of 67. Zhang was the last PLAAF representative to be on the Politburo.

Wang Hai (May 1985 - November 1992)

Wang Hai was born in Shandong province in 1925 and joined the anti-Japanese youth corps in 1944. He joined the Communist Party in 1945. After completing flight school in 1949, he served as a pilot at a flight training school, and a combined aviation brigade squadron commander. Beginning in 1951, he fought in the Korean War as a group commander, deputy regiment commander, and regiment commander in the 3rd Air Division. During the war, he shot down four aircraft and damaged five. After the war, he served at various times as a deputy division commander, division commander, deputy air corps commander, deputy department chief in Headquarters Air Force Training Department, commander of the Guangzhou Military Region Air Force, deputy commander and commander of the PLAAF. He was a representative at the CPC 12th, 13th, and 14th Party Congress, a member of the 12th, 13th, and 14th Party Central Committee, and a member of the 5th Plenum of the 3rd National People's Congress. When ranks were reintroduced into the PLA in 1988, Wang was the only PLAAF officer to receive the rank of general. He retired at age 65 in November 1992.

Cao Shuangming (November 1992 - November 1994)

Cao Shuangming was born in 1929 in Hebei province and joined the PLA in 1946. Having served in the 2nd Field Army, he was later sent to pilot training, which he completed in 1952. In 1953, he joined the "People's Volunteer Air Force" and participated in the Korean War as a deputy squadron commander (each squadron only has two to three aircraft). During the 1958 Taiwan Strait crisis, Cao was deputy commander of the 16th Air Division's MiG-17-equipped 48th Regiment and shot down one aircraft. He later served as a regiment commander, division commander, deputy air corps commander, and deputy commander and commander of the

Shenyang Military Region Air Force. Without having served at HqAF, Cao became PLAAF commander in November 1992. When ranks were re-instituted in 1988, Cao received the rank of lieutenant general. He was promoted to general in May 1993. Cao was a representative at the 12th and 14th Party Congress, was a member of the 14th Party Central Committee, and was a representative at the 6th and 7th National People's Congress. Besides reaching the mandatory retirement age of 65, Cao was reportedly fired in 1992 because of numerous aircraft accidents during his two-year tenure. Under Cao, almost all of the remaining Korean War-era PLAAF leaders were retired.

Yu Zhenwu (November 1994 - December 1996)

Yu Zhenwu was born in 1931 in Liaoning province and joined the Army in 1947. Upon graduating from flight school in 1951, he served in various regimental positions. In 1953, Yu was briefly assigned to Korea in the waning months of the war. After the war, he became one of the PLAAF's first test pilots and conducted the first flight of China's indigenously developed, but never produced, FT-1 trainer in July 1958. He also served as a group commander, division flight inspector, corp training director, regiment commander, deputy division commander, deputy director and director of training at PLAAF headquarters, and corps commander. In May 1983, he succeeded Wang Hai as commander of the Guangzhou Military Region Air Force. When Wang Hai became PLAAF commander in May 1985, Yu moved up to be a PLAAF deputy commander. As the deputy commander, he was responsible for schools, training, and engineering (maintenance). He became commander in November 1994 and reached retirement age in December 1996. When ranks were re-instituted in 1988, Yu received the rank of lieutenant general. He was promoted to general in January 1996. Yu was a representative at the 12th and 14th Party Congress, and was an alternate member of the 13th Party Congress Central Committee. Yu retired at the age of 65 in December 1996.

Liu Shunyao (December 1996-Present)

General Liu Shunyao was born in Shandong province in December 1939. He joined the PLA in 1958 and graduated from the PLA Air Force Flight School in 1964. After graduation, Liu served as deputy squadron commander, group commander, and deputy regiment commander in an air division. He began studies at the PLA Air Force Command Academy in 1977. After graduating, he served as a regiment commander, deputy division commander, division commander, deputy director and commander in 1986 of the Lanzhou Military Region Air Force's Wulumuqi Command Post (an air corps-equivalent organization). In 1990, he attended the PLA's National Defense University. In July 1990, he was assigned as deputy commander and then commander of the Lanzhou Military Region Air Force. In October 1994, he became a PLAAF deputy commander before finally taking over as commander in December 1996. In July 1995, he was conferred the rank of lieutenant general. Liu was promoted to general in July 2000. He was a member of the 13th Party Congress Central Committee.

APPENDIX C. PLAAF FOREIGN RELATIONS

The PLA Air Force began sending delegations abroad as early as August 1949, when the Air Force's first commander, Liu Yalou, led a delegation to Russia to purchase aircraft and equipment.⁹³⁵ From then until he died in 1965, he led two more delegations to Russia (1956 and 1961), as well as visiting Cuba (1963) and Pakistan (1964). Because of the PLAAF's decline during the Cultural Revolution, no further commander-led visits were taken until Commander Zhang Tingfa visited Pakistan in March 1979. Zhang's visit, which came as a result of China's economic opening, reinvigorated the PLAAF's program to familiarize itself with foreign air forces and to try to acquire foreign equipment and technology by sending delegations abroad and by inviting foreign air force delegations to visit China.

Since 1979, Zhang and his successors, Wang Hai, Cao Shuangming, Yu Zhenwu and Liu Shunyao, have emphasized direct contact with foreign air forces by leading an average of one delegation abroad per year and hosting visits to China by two to four foreign air force commanders annually.⁹³⁶ In addition, Zhu Guang became the first PLAAF political commissar to travel abroad when he visited the United States in 1988, and his successor, Ding Wenchang, led delegations to Cuba in 1996 and Portugal and Turkey in 1998. Based on an analysis of incomplete data, it appears that the PLAAF commanders and political commissars have visited at least twenty-three separate countries and hosted commanders from over twenty countries worldwide. The PLAAF has been most involved (three or more visits) with Australia, Bangladesh, Egypt, Pakistan, Portugal, Russia, Thailand, Turkey, the United States, and Zimbabwe.

Analysis shows that each of the PLAAF delegations led by the commander or political commissar have included directors from key headquarters departments, regional commanders, and/or personnel from air force research institutes and academies. In addition, most of the PLAAF deputy commanders and deputy political commissars have visited abroad as part of a delegations led by senior PLAAF or PLA officers. These types of visits also help indicate who the PLAAF is grooming for future leadership positions. As a deputy PLAAF commander, Liu Shunyao accompanied Defense Minister Chi Haotian to the United States in November 1996 and became the commander the next month. In September 1998, Deputy Political Commissar Qiao Qingchen accompanied Zhang Wannian to the United States and became the political commissar three months later.

There are several limitations to the future growth of the PLAAF's foreign relations program. The first limitation is the small size of the PLAAF's Foreign Affairs Division, which

⁹³⁵ Information on the PLAAF's foreign military relations comes from Allen and McVadon.

⁹³⁶ Based on information available concerning the 23 PLAAF visits abroad, ten included just one country, six included two countries, and seven included three countries.

only has about five full time officers and has not grown appreciably over the past fifteen years. These officers must plan the itinerary for and escort all foreign and PLAAF delegations. Second, as discussed previously, each commander is authorized only one visit abroad under ordinary circumstances and the number of foreign air force leaders accepted for visits to China is guided by the overall PLA visitors plan. Besides meeting with foreign commanders, the PLAAF also hosts or sends out an average of five to ten functional exchange delegations per year (about one per month). Third, the PLAAF must pay for all in-country expenses for visiting delegations and all international travel expenses for PLAAF delegations. Fourth, the PLAAF only has military attachés posted in three locations—Washington, London, and Moscow—and there are only about ten countries with air force attachés assigned to Beijing. This limits the day-to-day interaction between the PLAAF and foreign air forces.

APPENDIX D. HEADQUARTERS AIR FORCE COMMAND ORGANIZATION

The Headquarters Air Force (HqAF/*kongjun/kongjun zongsilingbu*) command staff consists of a commander, political commissar, four deputy commanders, two deputy political commissars, a chief of staff, and four deputy chiefs of staff.⁹³⁷ The PLAAF has a Party Committee (*dangwei*) and Party Standing Committee (*changwei*). The political commissar is the secretary and the commander is the deputy secretary of each committee. The deputy commanders, deputy political commissars, chief of staff, deputy chiefs of staff, and the three other first-level department directors make up the rest of the Standing Committee.

HqAF also has several specialized commissions, some of which are listed below:

- The Aviation Military Products Design Finalization Commission (*hangkong jungong chanpin dingxing weiyuanhui/hangdingwei*) was established in Beijing in January 1962, and was composed of members from the Ministry of Aviation and the PLAAF. Although it ceased working during the Cultural Revolution, it was revived in 1973. The commission is chaired by the deputy commander in charge of equipment and R&D;
- The PLAAF Science and Research Commission (*kongjun xueshu yanjiu weiyuanhui*) was established in Beijing in September 1983;
- The PLAAF Flight Safety Guidance Commission (*kongjun feixing anquan zhidao weiyuanhui*) was established in Beijing in October 1984. It is composed mostly of retired senior officers; and
- The Discipline Inspection Commission (*jilu jiancha weiyuanhui*) is chaired by the senior deputy political commissar.

Headquarters Air Force consists of four first-level departments – Headquarters, Political, Logistics, and Equipment – each of which have several second-level departments, bureaus, and offices. In turn, each of these sub-elements have subordinate elements. Although, this paper lists only those subordinate elements that have been identified in open source reporting, there are many elements that have not been noted. While not every second-level organization has the same subordinate elements, each second-level organization most likely has someone who is responsible for plans (*jihua*), finance (*caiwu*), training (*xunlian*), and administration (*guanli*). The remainder of this appendix provides information about the four first-level departments.

⁹³⁷ Unless specified, the information in this appendix was taken from Allen, 1991. Information about the second-level departments and the general responsibilities for each department are also found in *Kongjun da cidian*. See also Yao Jun and Xin Ming.

Headquarters Air Force, Headquarters Department

The Headquarters Department (*kongjun silingbu/kongsi*) is responsible for the PLAAF's organizational structure, policy, operations and intelligence planning, recruiting, and training. The chief of staff serves as the director of the Headquarters Department. There are four deputy chiefs of staff (DCS). Unlike the USAF, these deputy chiefs of staff are not the directors of the four first-level administrative departments. Each DCS has a broad range of responsibilities, which may cross one or more of the Headquarters Department's second-level departments/bureaus. The DCSs do not necessarily have the same corresponding responsibilities as the four deputy commanders. There are at least eighteen second-level departments/bureaus/offices, whose director is a senior colonel or colonel.

Although there are separate second-level departments which are responsible for the radar, communications, and AAA/SAM branches, there are no separate departments for airborne or aviation troops. The Operations Department and Training Department have primary responsibility for airborne troops. The reason there is not a separate aviation department today is that originally all of the existing departments supported the aviation troops. After the PLAAF and Air Defense Force merged in 1957, the air defense forces (AAA, SAM, and radar) became PLAAF branches and required separate, specialized administrative departments to handle their affairs.

The Headquarters Department has at least eighteen second-level elements discussed below. When the General Armament Department (GAD) was created in 1998, the PLAAF moved the second-level Equipment Department and Scientific Research Department to the first-level Equipment Department.⁹³⁸ It is not clear whether other elements of the Headquarters Department also moved over.

The **General Office** (*bangongshi*) is responsible for reviewing all paperwork from the Headquarters Department going to the command staff. The General Office has a director (*zhuren*) and three deputy directors (*fuzhuren*). One deputy director is responsible for foreign affairs, one for political work, and one for all other matters. Assistants for the political commissar/deputy political commissars also work in the Headquarters Department's General Office, not in the Political Department. The General Office has at least five subordinate divisions.

- Secretariat Division (*mishuchu*)
- Documents Division (*guan dang'anchu*)
- Foreign Affairs Division (*waishichu*)
- The Translation Unit (*fanyidui*) has a pool of trained translators who can be used as needed throughout the Air Force

⁹³⁸ Interview with PLA officials.

- The First Division (*yichu*) has staff officers who serve retired senior officers, such as commanders, deputy commanders, chiefs of staff, and deputy chiefs of staff
- The Second Division (*erchu*) has staff officers who serve retired senior political officers

The **Political Department** (*zhengzhibu*) is responsible for political affairs within the Headquarters Department. It has at least three divisions.

- The Cadre/Personnel Division (*ganbuchu*) is responsible for all personnel matters within the Headquarters Department
- Party Affairs Division (*zuzhichu*)
- Propaganda Division (*xuanchuanchu*)

The **Operations Department** (*zuozhanbu*) is responsible for all operational matters, including airborne and SAM/AAA operations. Although there is a AAA department, there is no separate airborne department. Whereas the operations department is responsible for operational matters, the other departments (i.e. radar, communications, etc.) are responsible for the technical matters. The operations department has a political commissar and four subordinate divisions, which are not further divided into offices.

- The First Division (*yichu*) is responsible for daily operations. Action officers are responsible for each of the major operational elements, such as radars, communications, fighters, bombers, AAA, SAM, etc.
- The Second Division (*erchu*) is responsible for operations plans, and, like the first division, has individuals from each functional area.
- The Command Division (*zhihuichu*) is responsible for issuing the orders to lower units and receiving messages from them.
- The Airfield Management Division (*guanchangchu*) is responsible for overall airfield operations.

The **Intelligence Department** (*qingbaobu*) is organized into four divisions along functional lines. It has at least one division.

- The Aerial Reconnaissance Division (*hangkong zhenchachu*) is responsible for all aspects of aerial reconnaissance, including photo interpretation.

The **Communications Department** (*tongxinbu/tongxinbingbu*) is responsible for all communications policy and technical matters. There are at least four divisions.

- Radio Division (*wuxiandianchu*)
- Telephone Division (*dianhuachu*)

- Command, control, and communications (C³) Division (*zhihui zidonghuachu*)
- The Technical Support Division (*jishu qinwuchu/jiqinchu*)

The **Training Department** (*junxunbu*) is responsible for overseeing all training at the unit-level, the flying academies, and the flight training portion of the Test Flight and Flying Training Center at Cangzhou Airfield. It is not responsible for training at other schools. The Training Department's Tactics Development Center, which is located at the PLAAF Command College in Beijing, is responsible for developing campaign tactics, not individual fighter tactics. Individual tactics development is the responsibility of the Training Study Center at Cangzhou. The Training Department is also responsible for the Test Flight Regiment (*shifei tuan*) at Xian Yanliang airfield and its subordinate Test Flight Groups (*shifei dadui*) which are assigned to each aircraft factory. For example, the 1st Test Flight Group is at the Shenyang Aircraft Corporation, and the 6th Test Flight Group is at the Shaanxi Aircraft Corporation. Throughout the PLAAF's history, the Training Department and School Department have been combined into a single department and then split into separate departments several times. Within the Training Department, there are at least four divisions/offices.

- The Training Equipment Research Office (*junxun qicai yanjiushi*)
- Flight Safety Division (*feixing anquanchu*)
- Plans Division (*jihuachu*)
- Airborne Troops Division (*kongjiangbingchu*)

The **Schools Department** (*junxiaobu*) is responsible for the planning, budget, regulations, facilities, administration, students, and staff to perform a particular type of training at the PLAAF's schools/academies. The other departments help determine the curriculum and provide the instructors to the Schools Department. PLAAF academies, except for flying academies, are responsible for recruiting students the same way civilian universities do. Prospective students must pass the national entrance examination before they are considered for the academies. There are at least three divisions.

- Plans Division (*jihuachu*)
- Ground Schools Division (*dimian xuexiaochu*)
- Flying Academies Division (*feixing xueyuanchu*)

The **Military Affairs Department** (*junwubu*) manages general Air Force affairs, organizational structure, and pilot and enlisted recruiting. Actual Air Force recruiting, however, is handled by the provincial military commands. Except for the aviation academies, all officer academies are responsible for recruiting their own cadets. There are at least two divisions/offices.

- Pilots Division (*feixingyuanchu*).
- The Pilot Recruiting Office (*zhaofeiban/zhaoshou feixingyuan bangongshi*) is responsible for setting the requirements and issuing the call for flying academy cadets.

The **Radar Department** (*leidabu/leidabingbu*) is responsible for writing the regulations and determining the organization and deployment of the radar troops. It is also responsible for all technical matters pertaining to radars. The Operations Department is responsible for radar employment. There is at least one division.

- The Technical Support Division (*jishu qinwuchu/jiqinchu*) is responsible for radar technical matters.

The **Antiaircraft Artillery Department** (*gaopaobu*) is responsible for antiaircraft artillery (AAA) and surface-to-air missile (SAM) administrative and maintenance matters. The Operations Department is responsible for operational matters. There are at least three divisions.

- Antiaircraft Artillery Division (*gaopaochu*)
- Surface-to-Air Missile Division (*dikong daodanchu*)
- The Technical Support Division (*jishu qinwuchu/jiqinchu*) is responsible for all AAA and SAM technical matters.

The **Electronic Countermeasures Department** (*dianzi duikangbu*) is responsible for ECM and information warfare plans and policy. This department most likely existed during the 1980s, but appears have been elevated to a second-level status, perhaps as early as 1988 when the GSD established the Electronic Countermeasures and Radar Department (*dianzi duikang leidabu*) as a second-level department. The GSD dropped the term radar from the title around 1990.

The **Administrative Bureau** (*xingzheng guanliju*) is in charge of housing, food, and transportation support (basically all logistics support) for HqAF. The Logistics Department handles these affairs for the rest of the Air Force. The Administrative Bureau also runs the PLA AF hotel in Beijing. In addition, the *guanliju* is responsible for providing the personnel to the Political Department as security forces for HqAF. The security forces, such as gate guards and those who deal with vehicle accidents, are organized into a company (*liandui*). There is no security police (*kongjun jingcha*) organization like in the USAF. At the base-level, the gate guards belong to the base security unit (*jingwei budui*), which in turn belongs to the Political Department. For example, at an airfield the Security Guard Flight (*fendui*) is divided into inner (*neichang*) and outer (*waichang*) security guards. The inner guards are responsible for barracks areas and barracks doors, while the outer guards are responsible for aircraft, airfield equipment security and maintaining airfield order. There are at least two divisions.

- Finance Division (*caiwuchu*)
- The Retired Cadre Division (*laoganbuchu*) is responsible for running the Headquarters Department's sanitoriums and is now manned by civil service personnel.

The original basis for air traffic control was the need to maintain air procedures (*kongzhong zhixu*) and to support flight safety. In the beginning, an Air Traffic Control Division (*hangxingchu*) and an Aircraft Dispatch Office (*hangxing diaodushi*) were set up within the HqAF Headquarters Department, as well as at each MRAF and air corps headquarters. An Aircraft Dispatch Office was also set up at each aviation unit and flying school airfield. The HqAF Air Traffic Control Division became the Air Traffic Control Bureau (*hangxingju*) in 1963. Today, the **Air Traffic Control Bureau** is responsible for all aircraft matters from take-off to landing, including flight routes. The bureau does not control anything that has to do with ground support. There are at least three divisions/offices.

- Flight Control Office (*feixing guanzhishi*)
- Air Traffic Control Division (*hangxingchu*)
- Technical Division (*jishuchu*)

The **Navigation Department** (*linghangbu*) originated during the early days of the PLAAF, when transports each had two navigators. This department was responsible for all navigator-related matters, such as writing the regulations and policies, and working with the Air Traffic Control Bureau to design flight routes. At the aviation unit-level, the Navigation Office is responsible for items such as notice to airmen (NOTAMs) and for filing and checking flight plans. The primary missions of the navigation system is to organize and implement air navigation, bombing, and ground controlled intercept (*dimian zhihui yindao*). PLAAF aviation units have specialized navigation personnel as follows:

- Bomber and transport divisions, regiments, and groups have a navigation director (*linghang zhuren*)
- Bomber and transport squadrons have a navigation chief (*linghang zhang*)
- Bomber and transport flight crews have navigators (*linghang yuan*)
- Fighter and ground attack units only have a division and regiment navigation director

The Navigation Department also works closely with the Schools Department to administer the Navigation Academy, which was established in 1958 as the 16th Aviation School in Huxian, Shaanxi Province. This academy trains navigators, air traffic controllers, and weapons controllers. The Navigation Department has at least two subordinate divisions:

- Navigation Division (*linghangchu*)
- Weapons Controller Division (*yindaochu*)

- The Weather Bureau (*qixiangju*) has weather centers located throughout China, including one at Xijiao airfield. This bureau is responsible for writing all the regulations pertaining to weather support and for organizing the weather support network.

The **Weather Bureau** (*qixiangju*) has weather centers located throughout China, including one at Xijiao airfield. This bureau is responsible for writing all the regulations pertaining to weather support and for organizing the weather support network.

The **Confidential Bureau** (*jiyaoju*) is responsible for encoding and decoding messages for electrical transmission.

The **Directly Subordinate Supply Department** (*zhishu gongyingbu/ zhigongbu*) is responsible for food services and support to the Headquarters Department, and possibly to the Political and Equipment Departments (the Logistics Department is located in a separate compound).

Headquarters Air Force, Political Department

HqAF's Political Department (*zhengzhibu/kongzheng*) is responsible for ideology and political work, MWR (morale, welfare, and recreation), Party affairs, cultural education, mass work, and teaching patriotism, as well as being responsible for officer appointments, promotions, and removal. There is a director (*zhuren*), two deputy directors (*fuzhuren*) and at least thirteen second-level departments/offices.

The **General Office** (*bangongshi*) performs the same duties as a Headquarters Department. All paperwork going to the director and deputy directors must be processed and approved through the General Office. It has four divisions/offices.

- The Secretariat Division (*mishuchu*) is responsible for screening all paperwork going to the director and deputy directors.
- The Administrative Division (*guanlichu*) is responsible for services, the budget, and logistics support to the Political Department.
- The Letters of Inquiry Division (*xinfangchu*) is responsible for receiving and responding to letters of complaint and inquiry, much the same as a USAF Inspector General's Office does.
- The Political Research Office (*zhengzhi yanjiushi/zhengyanshi*) is responsible for studying problems and writing up the necessary reports.

The **Party Affairs Department** (*zuzhibu*) has three subordinate divisions.

- The Party Committee Division (*dangweichu*) is responsible for the daily affairs of the PLAAF Party Committee.
- The Youth Division (*nianqingchu*) is responsible for all youth activities.

- The Party Affairs Division (*zuzhichu*) is responsible for statistics, awards, survivor benefits, women's affairs, and outstanding officer recognition.

The **Cadre/Personnel Department** (*ganbubu*) manages appointments, promotions, demotions, and all personnel matters. It has four divisions.

- The Appointment and Removal Division (*renmianchu*) is responsible for appointment, removal, and promotions.
- The Ranks Division (*junxianchu*) was established to work on the 1988 introduction of ranks in the PLAAF. This division may be abolished later.
- The Transfer Division (*tiaopeichu*) is responsible for selection, assignments, and transfers.
- The Science and Technology Division (*kejichu*) is responsible for schools, health, and technical matters. It works with the Schools Division (*yuanxiaochu*) in the General Political Department's Cadre/Personnel Department (*ganbubu*).

The **Propaganda Department** (*xuanchuanbu*) is in charge of propaganda, ideology, and mobilization, as well as internal PLAAF information and publications. It has three divisions.

- The Propaganda Division (*xuanchuanchu*) writes news articles.
- The Education Division (*jiaoyuchu*) is responsible for ideology and education. It has at least one group.
- Audio-Visual Education Group (*dianhua jiaoyuzu*).
- The Cultural Education Division (*wenhua jiaoyuchu*) is responsible for Cultural Education.

The **Security Department** (*baoweibu*) manages all security matters, including security for VIPs. At the base-level, it is called the Security Office (*jingweike*), and is responsible for base security. There are three Divisions.

- The Security Division (*baoweichu*) is responsible for ground security at PLAAF units. Personnel at HqAF who man the gates are from the Headquarters Department's Administrative Bureau, but they are responsible to the Security Division. The Security Division has a Prisoner Guard Unit (*kanshousuo*) which has a martial arts (*wushu*) team that competes throughout China.
- The Pilot Support Division (*kongqinchu*) is responsible for pilot security.
- The VIP Security Division (*jingweichu*) is responsible for PLAAF and foreign VIPs.

The **Cultural Department** (*wenhuabu*) is in charge of cultural education and recreational affairs. It has three subordinate elements.

- The PLAAF Political Works Troupe (*kongzheng wengongtuan*), which is also known as the Song & Dance Troupe (*kongjun gewutuan*), is a directly subordinate unit (*zhishu budui*). The troupe performs throughout China and sent a 50-member group to the United States to perform at the USAF MAJCOMs in 1986.
- The HqAF Women's Basketball Team (*nuzi lanqiudui*) is a directly subordinate unit. They competed in North Korea in October 1988.
- The HqAF Men's Basketball Team (*nanzi lanqiudui*) is a directly subordinate unit.

The **Liaison Department** (*lianluobu*) is responsible for studying relations with Taiwan, and for enemy propaganda and interrogation. There are no Divisions.

The **Mass Works Department** (*qungongbu*) has one subordinate Division.

- The Mass Works Division (*qungongchu*) is responsible for PLAAF relations with the government and local people. It helps resolve issues such as land disputes and incidents between the local populace and PLAAF members.

The **Retired Cadre Bureau** (*laoganbujü*) was created in the late 1980s and is responsible for all retired officer's affairs. With the demobilization and retirement programs that began in 1985, this department has the responsibility of finding jobs and housing for some of these people, especially those who joined the PLA prior to 1949. There are two retired divisions, based upon the date the PLAAF member joined the military.

- The Retired Division (*lixiuchu*) is responsible for cadres who joined the military prior to 1 October 1949. These cadres receive 100 percent of their active duty salary and are entitled to live in a retired cadre sanitorium (*ganxiusuo*).
- The Retired Division (*tuixiuchu*) is responsible for cadres who joined the military after 1 October 1949. They receive 80-90 percent of their active duty salary but are not entitled to live in a *ganxiusuo*. This division helps them find housing and possibly another job.

The **Air Force Newspaper Office** (*kongjun baoshe*) is responsible for the *Air Force Newspaper* (*kongjun bao*) which is published three times per week. There is an Editorial Office (*bianjibu*). Some people also work on *Air Force* (*zhongguo kongjun*) magazine.

The **Editing Office** (*bianshenshi*) helps older cadres write their biographies.

The **Procuratorate** (*jianchayuan*) investigates matters requiring disciplinary action. This office works closely with the PLAAF's Discipline Inspection Commission (*jilu jiancha weiyuanhui*), which is chaired by the senior deputy political commissar.

The **Court** (*fayuan*) tries offenders who have been accused of a crime or wrong doing. This office works closely with the Procuratorate and Discipline Inspection Commission.

Headquarters Air Force, Logistics Department

The Logistics Department (*houqinbu/konghou*) was established in November 1949 from within the Fourth Field Army. It is responsible for supply, as well as support for operations, training, and living. The department's command staff includes a director, political commissar, two deputy directors, a chief of staff, and two deputy chiefs of staff. The headquarters for the Logistics Department is the only one of the four first-level departments which has its own separate compound and is not located at HqAF. This is also true for most, if not all, of the MRAF Logistics Departments.

Within the Logistics and Equipment Departments, all desk officers are referred to as assistants (*zhuli*), but in the Headquarters and Political Departments, they are referred to as staff officers (*canmou*) or secretaries (*mishu*). The Logistics Department has at least sixteen second-level departments/bureaus. It is also responsible for various research institutes and units, the Air Force general hospital and subordinate hospitals, the four stations equipment repair factories, and all air materiel depots. It is not clear, but the Materials Department and Air Materiel Department may have moved to the Equipment Department in 1998.

The Logistics Department's basic mission is to provide supplies for PLAAF construction, operations, training, and daily life. It carries out this primary mission in the following ways:

- Deploys logistics forces
- Handles logistics mobilization work
- Provides procurement, allocation, acceptance testing, storage and care, maintenance and repair, transportation, and supply of AAA, SAM's, ammunition, radars, vehicles, and boats
- Provides logistics training and education
- Provides logistics management work
- Manages logistics equipment

The Logistics Department's responsibilities for depot management include the following:

- Improve storage techniques
- Implement moistureproof measures
- Implement safe protection and disposal measures
- Formulate regulations for receipt and issue and for warehouse personnel
- Select warehouse personnel for school
- Conduct OJT training at the depot
- Enhance mechanization and automation
- Purchase complete sets of some machinery

- Allocate microcomputers for management
- Build some automated management warehouses that are equipped with elevated cubes

Logistics funds are arranged by balancing income and expenditures, proceeding with authority, ensuring that the focal points in the five year plan are met, and abiding by general principles. Basically, the GLD allocates two types of money to the PLAAF annually. One type is allocated to the Headquarters Department's Equipment Department for equipment purchases. The second type is allocated to the Aeronautical Engineering Department and Logistics Department for maintenance and spare parts, respectively.

There are three types of materials (*wuzi*) as follows:

- PLAAF units' common use material (*tongyong wuzi*) is based on the GLD's unified plan, procurement, and supply. The GLD allocates a fixed amount of money to the PLAAF Logistics Department which can only be used to purchase a specified amount and type of common use material.
- PLAAF Hq organizes the procurement and supply of specialized material (*zhuanrong wuzi*) for PLAAF units. The GLD allocates some money to the PLAAF Logistics Department for this specialized material, and the PLAAF can decide itself how to use this money to buy material from within the PLAAF.
- Local materials needed by units can be purchased directly from the market from unit funds.

Officers are trained on three levels – basic (*chuji*), intermediate (*zhongji*), and advanced (*gaoji*). Beginning in the 1950s, two schools and fifteen logistics specialty training regiments/units were created, but these were severely affected during the Cultural Revolution. Today, basic training is conducted at the PLAAF Logistics Academy (*kongjun qinwu xueyuan*) in Xuzhou, Jiangsu Province, for each of the specialties except medical. The PLAAF has its own Medical School (*kongjun yixue zhuanke xuexiao/kongyixiao*) in Jilin, Jilin Province. Intermediate training is conducted at the PLAAF Command College (*kongjun zhihui xueyuan*) in Beijing, and the GLD provides advanced training at the Logistics Academy (*houqin xueyuan*) in Beijing.

New enlisted logistics personnel receive training at one of several logistics training regiments (*houqin xunlian zhuanye tuan*), which are mostly independent regiments (*duli tuan*). These regiments have several specialties, but some only have one or two. The size, scope, and number of the training regiments depends upon the specialty and the total number of PLAAF personnel who need that particular type of training. For example, regiments for larger specialty fields, such as medical or transportation, will be larger and more numerous. Enlisted medical training is eight months long. NCOs receive advanced training at Training Groups (*xunlian dadui*). The PLAAF also has Training Regiments for specialized logistics troops (*zhuanrong bing*).

The Logistics Department is responsible for some equipment repair at vehicle repair factories (*qiche xiuli chang*), armament and radar repair factories (*junxie leida xiuli chang*),

engineering equipment repair factories (*gongcheng jixie xiuli chang*), and aviation four stations repair factories (*hangkongsizhan xiuli chang*), all of which are subordinate to the Logistics Department. These repair factories are responsible for vehicles, radar, armament, engineering equipment, and aircraft start vehicles, and oxygen trucks, etc.

The Logistics Department has four levels of health facilities listed below, and each flying regiment has several flight surgeons assigned to a flight surgeon section:

- HQ PLAAF general hospital
- A central hospital at each MRAF
- A clinic (*menzhenbu*) at each unit headquarters
- A Health Office or Team (*weishengke/weishengdui*) at each unit's basic element

Each pilot also has 30 days per year of convalescence at one of the following ten PLAAF sanitoriums (*liaoyangyuan*):

City	Province	MRAF
Xingcheng	Liaoning	Shenyang
Dalian	Liaoning	Shenyang
Beidaihe	Hebei	Beijing
Xian Lintong	Shaanxi	Lanzhou
Hangzhou	Zhejiang	Nanjing
Jiujiang	Jiangxi	Nanjing
Guilin	Guangxi	Guangzhou
Wuhan	Hubei	Guangzhou
Qingdao	Shandong	Jinan
Chengdu	Sichuan	Chengdu

The Logistics Department's **Headquarters Department** (*silingbu*) serves the same purpose as a General Office and is responsible for the functional control, including the budget, plans, and regulations, for all of the research institutes that belong to the Logistics Department. In the 1950s and 1960s, the Logistics Department established the Medical and Fuels Research Institutes. After the third plenum of the 11th Party Congress, research institutes such as those for

capital construction, aviation munitions, and surface-to-air missiles were established. This department has at least three subordinate divisions/offices:

- The Science, Technology, and Equipment Division (*keji zhuangbeichu*) is responsible for logistics science and technology, and academic theory and research, and is responsible for the Logistics Department's research institutes' budget, writing regulations, and assigning requirements.
- Translation Office (*fanyishi*)
- Combat Support Division (*zuoqian qinwuchu/zhanqinchu*)

Political Department (*zhengzhibu*). No information is available, but it is probably organized similar to the Political Department in the Headquarters Department, in that it has at least a Cadre/Personnel Division that is responsible for all logistics personnel matters.

The **Finance Department** (*caiwubu*) formulates the PLAAF's budget, requests the PLAAF's funding, allocates the funds, formulates the standardization system for logistics special use funds, and performs financial accounting. There is at least one division.

- Accounting Division (*kuaijichu*)

The **Quartermaster Department** (*junxubu*) takes charge of quartermaster work by organizing planning, supply, and management of provisions and clothing. It is also responsible for quartermaster research. It has at least one division.

- Clothing Division (*beizhuangchu*)

The **Health Department** (*weishengbu*) is responsible for organizing epidemic prevention, aviation health, and medical aid; for family planning; for supplying and managing medicine and medical equipment; and for writing the regulations on all health matters. It is also responsible for all the PLAAF hospitals, the ten pilots' sanatoriums, the Medical School in Jilin, the administrative control of the Fourth (Aviation Medicine) Research Institute, and the health units down to the lowest level. There is at least one division.

- Health Services Division (*weisheng qinwuchu*)

The **Armament Department** (*junxiebu*) has a director, one deputy director, and at least five divisions. Although not confirmed, this department was most likely moved under the Equipment Department in 1998.

- Plans and Finance Division (*jihua caiwuchu*)
- Aviation Munitions Division (*hangkong danyaochu*) is responsible for bombs, air-to-air missiles, and rockets.
- The Avionics/Electronics Division (*dianzichu*) is responsible for computers.
- Radar Division (*leidachu*)
- The Surface-to-Air Missile Division (*dikong daodanchu*) is responsible for SAM and AAA production.

The **Transportation Department** (*yunshubu*) is responsible for maintenance and management of military transportation, vehicles, boats, and special rail lines and roads. It coordinates the PLAAF's monthly, quarterly, and annual rail transportation requirements with the General Logistics Department for shipping what amounts to almost all of the PLAAF's supplies throughout China. This department also has vehicle battalions, car repair facilities, and boat troops. The boat troops are stationed along the Yangzi river and the coast for supplying fuel to air bases.

The **Fuels Department** (*youliaobu*) is responsible for procurement, storage, supply, and management of fuel and fuel equipment. Although not confirmed, this department was most likely merged with the Materials Department (*wuzibu*) as the Fuels and Materials Department (*youliao wuzibu*) in the early 1990s in conjunction with the merger of the two departments within the General Logistics Department.

The **Materials Department** (*wuzibu*) is responsible for application, allocation, supply, and management and storage of all materials, excluding air materiel. Although not confirmed, this department was most likely merged with the Materials Department (*wuzibu*) as the Fuels and Materials Department (*youliao wuzibu*) in the early 1990s in conjunction with the merger of the two departments within the General Logistics Department.

The **Airfield Construction Department** (*xiujianbu*) is primarily responsible for airfield runway construction. There are several engineering units (*gongchengbing zongdui*) that are closely associated with the construction department, but are directly subordinate to the Logistics Department. These units are equivalent to a corps (*jun*) or division (*shi*) and have several subordinate Engineering Divisions (*jianzhu gongcheng chu*), Groups (*dadui*), and construction material compounds. From June-November 1950, the PLAAF selected seven army engineering companies from throughout China and organized them into five Airfield Construction Engineering Groups (*jichang xiujian gongcheng dadui*). Each Group, consisting of about 600 people, had one subordinate Engineering Company (*gongcheng lian*) and two Airfield Engineering Companies (*jichang gongcheng lian*). In January 1951, they were officially named the PLAAF 1st, 2nd, 3rd, 4th, and 5th Engineering Groups. In May 1951, the 6th Engineering Group was formed in the Xinan Military Region.

By the late 1980s, these engineering units were used for building PLAAF facilities, but also contract out for civilian projects, such as bridges, roads, buildings, and airfields. For example the 8th Engineering *zongdui* repaired/expanded airfields in Dandong, Dalian, Qiqihar, and in Xinjiang during the 1980s. It also built a new airfield at Shenyang Taoxian from November 1986 to November 1988. Once this project was over, the *zongdui* was reduced from 9,000 to an Engineering Division (*chu*) with 300 personnel, and consequently had its status downgraded from that of a corps to a regiment. This move was taken as part of the overall reduction of forces. Most of the remaining people became civil service personnel.

The **Airfield and Barracks Management Department** (*jichang yingfang guanlibu/jiyingbu*) is responsible for airfield command shelter engineering, barracks management, design and construction of airports, battlefield shelters, cave warehouses, warehouses, fuel depots, factories, and housing, as well as daily maintenance of the housing area and base facilities. It has at least one division.

- Environment and Greening Division (*huanjing luhuachu*)

The **Air Materiel Department** (*hangkong cailiaobu/hangcaibu*) was most likely moved under the Equipment Department in 1998, but this has not been confirmed. The Air Materiel Department has a director, one deputy director, and at least six divisions to manage procurement, storage, and supply of air materiel, and to organize the management and four stations services support for retired aviation equipment. The difference between the materials department and the air materiel department is that the former is responsible for items such as lumber and concrete for the entire PLAAF, and the latter is responsible only for aircraft and aircraft support equipment for aviation troops only. It is not responsible for radar, communications, airborne, SAM, or AAA troops. Unlike most of the other PLAAF logistics second-level departments, the air materiel department does not have a counterpart organization at the GLD, and is therefore not responsible to any specific GLD department. The Air Materiel Department's six divisions are listed below:

- Plans Division (*jihuachu*)
- Finance Division (*caiwuchu*)
- Avionics Division (*hangkong dianzichu*)
- Aircraft and Engine Division (*feiji fadongjichu*)
- Ground Equipment Division (*dimian shebeichu*)
- Four Stations Division (*sizhanchu*)

Supply depots are organized on a three tier structure – first-level (*yiji*) depots are located in various military regions but are subordinate to HqAF; second-level (*erji*) depots are located in each military region and are subordinate to the MRAF Headquarters; and third-level (*sanji*) depots are located at and subordinate to operational units. For example, each aviation

division/airfield has a third-level depot, and the second-level depots can support the third-level depots in time of need. In addition, first-level depots can either supply the second-level depots or send items directly to the unit if necessary. The PLAAF's first-level air materiel depots are directly subordinate to the Logistics Department Hq, but are functionally (*yewu*) responsible to the Plans Division within the Air Materiel Department.

The **Directly Subordinate Supply Department** (*zhishu gongyingbu/ zhigongbu*) is responsible for logistics support to HqAF only. It works closely with the Administrative Bureau/Divisions at HqAF. Since the institution of the PLA's civil service program in 1988, this department is responsible for logistics support to the HqAF civil service personnel. There is no equivalent at the MRAF Headquarters, air corps, command post, or division/base-level, but each Military Region Logistics Department has a Directly Subordinate Supply Department that performs the same functions.

The **Audit Bureau** (*shenjiju*) performs audits and inspections to determine how money is being used.

In July 1962, HqAF Logistics Department established an Engineering Design Bureau (*kongjun gongcheng shejiju*) and each MRAF Logistics Department established an Engineering Design Office (*shejishi*), which were responsible for designing defense construction projects. Today, this department is known as the **Engineering Design and Research Bureau** (*gongcheng sheji yanjiuju*). It also designs engineering equipment such as frequency detectors and processors. This bureau may also have a subordinate factory assigned to it.

The **Administrative Division** (*guanlichu*) has the same role as the Administrative Division in the Political and Aeronautical Engineering Departments and works closely with the Headquarters Department's Administrative Bureau, and the Directly Subordinate Supply Department.

The **Production Management Office** (*shengchan jingying bangongshi*) guides PLAAF units' production management work, and is responsible for thousands of small businesses/enterprises which the PLAAF has established to make money. For example, and above are in charge of farms, while most airfield supply stations, ground brigades, and ground regiments have established non-staple food bases. The large-type production bases near Beijing at Tongxian, Sanhe, and Caojiawu produced 4000 pigs, 2000 suckling pigs, and 200,000 chickens in 1988.

Headquarters Air Force, Equipment Department

When the PLAAF was founded in November 1949, an Air Force Engineering Department (*kongjun gongchengbu*) was established to manage aircraft maintenance, and the PLAAF's Engineering College in Xian was established on 1 September 1964. In September 1969, the

Engineering Department was abolished and its Field Maintenance Department (*waichangbu*) was subordinated to the Headquarters Department as the Maintenance Department (*jiwubu*). On 1 May 1976, the current Aeronautical Engineering Department (*hangkong gongchengbu/konggong*) was established as a first-level department. In November 1992, the Aeronautical Engineering Department changed its name to the Equipment-Technical Department (*kongjun zhuangbei jishubu*).⁹³⁹ It was not until 1998, when the General Armament Department (GAD) was created, that some of the departments within HqAF's Headquarters Department and Logistics Department were moved over to the newly-named Equipment Department to be in alignment with the GAD. Other than the Equipment Department and Scientific Research Department, it is not clear which other departments or sub-elements were transferred over.

The Equipment Department has a director and at least two deputy directors. One deputy director is responsible for the Field Maintenance and Procurement Departments, and the other deputy director is responsible for the Factory Management Department, Political Department, and the General Office. A third deputy director was probably added in 1998 to manage equipment and R&D.

Whereas the PLAAF's Headquarters, Political, and Logistics Departments have always been a mirror image of higher level PLA department (GSD, GPD, and GLD, respectively) the Aeronautical Engineering/Equipment Department did not have an equivalent higher level department until the GAD was created.

The Equipment Department is responsible for the following:

- All aircraft and engine maintenance, repair, and procurement
- Aviation maintenance/repair research at two research institutes
- Aviation maintenance/repair regulations
- Aircraft ground support equipment

Aircraft and engine maintenance is carried out at the following three levels:

- Aviation Repair Factories (*hangkong xiuli chang*) are responsible for major overhaul (*fanxiu*). These factories are directly managed by either HqAF or by the HqAF and the MRAF Headquarters together.
- Central Repair Factories (*zhongxin xiuli chang*) are responsible for major (*daxiu*) and intermediate (*zhongxiu*) repairs, and are managed by the MRAF Headquarters.
- Divisions and academies have Repair Factories (*xiuli chang*), which are responsible for intermediate and minor (*xiaoxiu*) repairs, and are managed by the Division or Academy.

⁹³⁹ Kongjun da cidian, p. 146.

Prior to 1998, the Logistics Department, not the Aeronautical Engineering Department, was responsible for maintenance of equipment belonging to AAA, SAMs, radar, communications, or airborne troops/units. This situation may have changed when the Equipment Department took over some responsibilities from other departments. Although the Aeronautical Engineering Department was not responsible for SAMs or AAA maintenance, it was responsible for air-to-air missiles.

Maintenance personnel are trained in several ways, depending upon their rank (officer or enlisted). Officers are trained at the Aeronautical Engineering College (*kongjun gongcheng xueyuan*) in Xian, or at the Maintenance Technical Training Schools (*hangkong jishu zhuanye xuexiao*) in Xinyang or Changchun. In the 1970s, three maintenance schools (*hangkong xiuli gongcheng jigong xuexiao*) were established in Jilin, Changsha, and Xian Yanliang. From 1982-1985, these changed to Aviation Engineering Schools (*hangkong gongcheng xuexiao*), which trained intermediate-level specialized staff and workers. In August 1986, eight Aviation Maintenance Training Regiments (*hangkong jiwu xunlian tuan*) were established to train new enlisted maintenance troops. The Equipment Department works closely with the Headquarters Department's Schools Department and provides the curriculum and instructors for these schools.

The Equipment Department has at least seven second-level departments/offices/divisions:

The **General Office** (*bangongshi*) has at least two subordinate divisions/offices.

- Secretariat Division (*mishuchu*)
- Translation Office (*fanyishi*)

The **Political Department** (*zhengzhibu*) is probably organized similar to the Political Department in the Headquarters Department and has at least a Cadre/Personnel Division (*ganbuchu*) to manage personnel matters for the Equipment Department.

The **Field Maintenance Department** (*waichangbu*) is responsible for all first- and second-level maintenance at the aviation division/base-level, and works closely with the First (Maintenance) Research Institute in Beijing. This department also has directly subordinate repair and spare part factories (*xiupeichang*) for second-level maintenance in each Military Region. There are at least seven divisions and subordinate offices.

- Aircraft Division (*feijichu*)
 - Bomber Office (*hongzhake*)
 - Fighter and Ground Attack Office (*qianqiangke*)
 - Transport Office (*yunshuke*)
 - Helicopter Office (*zhishengke*)
 - Aircraft Service Life and Reliability Office (*feiji dingshou he kekaoxing bangongshi*)
- Plans Division (*jihuachu*)

- Avionics Division (*dianzichu*)
- Armament Division (*junxiechu*)
- Quality Control and Safety Division (*zhianchu*)
- Special Equipment Division (*teshechu*)
- Training Division (*xunlianchu*)

The **Procurement Department** (*dinghuobu*) procures all PLAAF aviation equipment from domestic and foreign suppliers and, like the USAF AFPRO system, is responsible for all factory and MRAF procurement representatives (the Scientific Research Department also has some plant representatives). It has at least two subordinate divisions/offices.

- Training Division (*xunlianchu*).

The **Factory Management Department** (*gongchang guanlibu/gongguanbu*) is responsible for all aircraft and engine depot-level repairs and major modifications, and works closely with the Repair Research Institute in Nanjing. The department has several distribution warehouses located throughout China, including Beijing, Dalian, and Shanghai, where items such as engines are sent after being repaired. The equipment is then returned directly to a unit or given to the Logistics Department's supply depots for distribution. The Factory Management Department has at least six subordinate divisions.

- Technical Division (*jishuchu*)
- Production Planning Division (*shengchan jihuachu*)
- Finance Division (*caiwuchu*)
- Quality Control Division (*zhiliangchu*)
- Air Materiel Division (*hangcaichu*)
- Training Division (*xunlianchu*)

The Factory Management Department has twenty-one repair factories which employed 40,000 workers in 1989, all of whom were civilians. All of the factories are under the factory management responsibility system, which increases the autonomy of the factory managers, reduces emphasis on planned quotas, and allows the factories to produce goods outside the plan for sale on the market. The factories are also allowed to retain some of the profit for reinvestment and for bonuses for the workers. Each factory has a public name, a two-digit PLAAF designator, and a four-digit (57XX) GLD designator. Most, if not all, of the factories are located near a PLAAF airfield.

In March 1958, the PLAAF established the Air Force Military **Scientific Research Department** (*kongjun junshi kexue yanjiubu*) as a first-level administrative organization, with Deputy Commander Chang Qiankun as the first Director. In addition, a Scientific Research

Guidance Commission (*kexue yanjiu zhidao weiyuanhui/kewei*) was established at units (*danwei*) of regiment-level and above, and each MRAF established a Scientific Research Office (*keyanshi*). Today, the Scientific Research Department (*keyanbu*), which is similar to the USAF systems command, has a director and four deputy directors. This department, which was transferred from the Headquarters Department to the Equipment Department in 1998, is responsible for the organization to evaluate and monitor the PLAAF's weapons R&D plans and programs, and for reporting their operational requirements, as well as their tactical and technical criteria, to higher authorities. The department researches and drafts the PLAAF's weapons development technical policies, as well as drafting the necessary rules and regulations for implementation.

In order to carry out its mission, the Scientific Research Department is divided into three general areas – integration (*zonghe*), technical (*jishu yewu*), and information/data (*qingbao ziliao*). In addition, it has special research units, military factory representatives, acceptance testing and test flight units, and training centers. This department is responsible for the planning, budgeting, and establishing of requirements for all of the research institutes within the Headquarters Department.

The integration area includes the following divisions and elements:

- The Plans Division (*jihuachu*)
- The Finance Division (*caiwuchu*)
- The Testing and Test Flight Division (*shifeichu*). This division manages the flight test program. The PLAAF's missile test base (*daodan shiyan jidi*) in northwest China and the flight test portion of the flight test and training center (*feixing shifei xunlian zhongxin*) at Cangzhou Airfield are also under the Scientific Research Department's functional control through this division.
- The Technical Innovation Division (*jishu gexinchu*). When someone at a unit develops a new technique or a piece of equipment, they submit it through the proper channels to this division. This division is also responsible for the budget, regulations, and overall management of the eight research institutes and various laboratories that belong to the Headquarters Department.
- The Aviation Military Products Design Finalization Commission (*hangkong jungong chanpin dingxing weiyuanhui*) was established in Beijing in January 1962 with 16 members, and the Aviation Design Finalization Commission General Office (*hangkong dingxing bangongshi/hangdingban*) was formed within the PLAAF's Scientific Research Department to handle the commission's daily affairs. The commission ceased working during the Cultural Revolution, but was revived in 1973.
- The Standardization Office (*biaozhunhua bangongshi*)

The technical area includes the following divisions:

- The Aircraft and Engine Division (*feiji fadongjichu*)
- The Airborne Weapons and Equipment Division (*jizai shebei wuqichu*)
- The Communications and Navigation Division (*tongxin daohangchu*)
- The Radar and Electronic Countermeasures Division (*leida dianziduikangchu*)
- The Surface-to-Air Missile Division (*dikong daodanchu*) is responsible for SAMs and AAA
- The Support Equipment Division (*baozhang shebeichu*)

The Science and Technology Data Information Center (*keji ziliao qingbao zhongxin*) is primarily responsible for collecting and assessing technical information on foreign weapon systems and managing the PLAAF's S&T information/intelligence program. Exhibitions and technical exchanges with foreigners also fall within the center's charter.

The **Equipment Department** (*zhuangbeibu*), which was transferred from the Headquarters Department in 1998, decides how much and what types of items the PLAAF should procure. This department works closely with the Aviation Equipment Division (*hangkong zhuangbeichu*) within the General Armament Department's Equipment Department. Within the PLAAF, the Scientific Research Department is responsible for R&D; the Equipment Department decides how many and when to buy the equipment and is responsible for general management of the equipment; and the Procurement Department buys the equipment. There are at least seven divisions.

- The Excess Equipment Management Division (*bianyu zhuangbei guanlichu*) is responsible for equipment in the Air Force inventory that is excess or is no longer operational.
- The Foreign Assistance Division (*yuanwaichu*) is responsible for foreign military sales.
- The Finance Division (*caiwuchu*) pays for new equipment in accordance with existing requirements.
- The Aviation Division (*hangkongchu*) is responsible for all aircraft.
- The Ground Equipment Division (*dimian zhuangbeichu*) is responsible for vehicles such as trucks and jeeps.
- The Plans Division (*jihuachu*) is responsible for all the plans.
- The Administrative Division (*guanlichu*) distributes equipment according to requirements in the field. The officers in this division are responsible for aircraft, vehicles, radar, SAM/AAA, and communications.

The **Administrative Division** (*guanlichu*) performs the same functions for the Equipment Department as the Administrative Bureau does for the Headquarters Department.

APPENDIX E. ORGANIZATIONAL STRUCTURE BELOW HEADQUARTERS AIR FORCE

At all levels from the regiment to the MRAF headquarters, the command staff consists of at least the following personnel:

- Commander
- Political commissar
- Deputy political commissar(s) (oftentimes is also the director of the Political Department)
- Deputy commander(s)
- Chief of staff
- Possible deputy chief(s) of staff
- Director of the Political Department

The command staff members make up the Party Standing Committee (*changwei*), of which the political commissar is usually the secretary. Other members of the Party Committee (*dangwei*) include the director of the logistics organization and the Equipment/maintenance organization, as well as a representative from the subordinate regiments or battalions. Each operational unit commander works for the next higher echelon commander through that commander's Operations Division/Department.

The Headquarters, Political, and Logistics Departments and most of their subordinate offices are represented at each level below HqAF: MRAF headquarters, air corps/command post/base, and operational unit. In general, the MRAF and air corps organization is the same. While these three departments, along with the Equipment Department, remain as departments at the MRAF and -level, the second-level departments are reduced by one step at each level below HqAF (i.e. departments/*bu* become divisions/*chu*, and divisions become offices/*ke*).

At the operational unit level, there is a Headquarters Department, Political Department/Division, Logistics Department/Division or Field Station (*chanzhan*), and Maintenance Division.⁹⁴⁰ The chief of staff (who is also the director of the Headquarters Department) and the director of the Political Department are co-equals at these levels. In some cases, the deputy political commissar is also the director of the Political Department. Below these first-level elements, there is a further reduction of the second-level elements into administrative offices (*shi/ke*), groups (*zu*), or branches (*gu*). There are also operational elements such as groups (*dadui*), squadrons (*zhongdui*), battalions (*ying*), companies (*lian*) or flights (*fendui*), which carry out the tasks.

⁹⁴⁰ The *chanzhan* is the logistics element of for the airfield.

In order to exercise the Party's absolute leadership over the military, a Party Committee and Standing Committee is established at each regiment (and equivalent) and above. The political commissar is normally the secretary of the Party Committee at these levels. However, certain commanders with unique experience levels have also served as the secretaries of their Party Committees and Standing Committees.⁹⁴¹ Grassroots Party Committees (*jiceng weiyuanhui*) are established at each battalion and equivalent. Grassroots Party Branches (*dangde jiceng zhibu*) are set up at the company-level.

Besides the Party Committee, political organizations have been established in each regiment and higher, and their equivalent. The GPD is the highest leading body for political work in the PLA. While Divisions and brigades have a Political Department, regiments have a Political Division. Within the Political Department/Division, there is a director, deputy director(s), and functional departments/divisions/offices equivalent to those at HqAF (i.e. secretariat, propaganda, security, cultural, cadre/personnel, etc.).

Political commissars are assigned to units at and above the regimental-level, and political instructors are assigned to units below this level. Political instructors are also assigned to the PLAAF's flying groups and their maintenance squadrons. Political commissars' duties include teaching the CCP line, policies, and principles; handling personnel issues such as promotion, selection, and transfers, and coordinating on recruitment and training matters; overseeing public affairs such as cultural, artistic, and athletic work. Political instructors at the battalion and below receive basic training at the PLAAF Political Academy in Shanghai and political commissars receive senior-level training at the Air Force Command College in Beijing.

Under the Party Committee's collective leadership, the PLAAF has a division of responsibilities at each level. For example, all major issues are decided jointly, or collectively, by the Party Committee. If the issue concerns military affairs, then the military officers or commander will carry out the decision. If the issue concerns political matters, then the political officers are responsible for implementing the decision. In theory, an Air Force unit's commander and political commissar are equal positions.

In the absence of the commander, the political commissar is responsible for carrying out the unit's mission in conjunction with the deputy commander(s). In practice, the rank relationship between the commander and the political commissar is obscure, but has sometimes been forged over many years of working together as they rose through the ranks together.

One of the major differences between aviation and non-aviation units is the maintenance organization. At the HqAF, MRAF, and levels, the Equipment Department is responsible for aviation maintenance and the Logistics Department is responsible for non-aviation (SAM, AAA, communications, and radar) maintenance. For aviation troops, the maintenance organization at a division/airfield is the Maintenance Division (*jiwuchu*), and at a regiment it is the Maintenance Group (*jiwu dadui*). For SAM and AAA troops, there is a Maintenance Department (*jishubu*) at

⁹⁴¹ This was the case in the Nanjing, Jinan, and Chengdu MRAFs in the late 1980s.

the brigade-level and a Maintenance Division (*jishuchu*) at the regiment-level, which are co-equals to the Logistics Department and Division, respectively. However, the Logistics Division is responsible for maintenance at a communications regiment. These should not be confused with the Technical Support Divisions (*jishu qinwuchu*) within the Headquarters Department's AAA, SAM, Radar, and Communications Departments/ Divisions at the HqAF, MRAF headquarters, and air corps-levels, which are responsible for the technical and operational details of these systems.

Military Region Air Force Headquarters

The MRAF headquarters is organized almost identically to HqAF, except that the second-level departments (*bu*) and bureaus (*ju*) at HqAF are lowered to divisions (*chu*) at the MRAF, and HqAF's divisions (*chu*) become offices (*ke*) at the MRAF. Each of these organizations performs the same functions as its counterpart at HqAF. In most cases, the political commissar is the secretary of the Party Committee and Party Standing Committee. Each MRAF headquarters has a Party Committee with a Standing Committee.

Listed below are the command staff and administrative elements at the MRAF headquarters that have been noted, but almost all of the HqAF second-level elements are probably represented. In addition, the rank structure for the MRAF headquarters is as follows:

Position	Rank
Commander	Lieutenant General
Political commissar	Lieutenant General
One deputy political commissar ⁹⁴²	Major/Lieutenant General
Two deputy commanders	Major General
Chief of staff	Major General
Two deputy chiefs of staff	Major General
Headquarters Department director	Major General
Deputy director	Senior Colonel/Colonel
Political Department director	Major General
Deputy director	Senior Colonel/Colonel
Logistics Department director	Major General

⁹⁴² In some instances, the deputy political commissar is also the director of the Political Department.

Deputy director	Senior Colonel/Colonel
Equipment Department director	Major General
Deputy director	Senior Colonel/Colonel

MRAF Headquarters Department

Within the MRAF headquarters, the chief of staff acts as the director and the deputy chiefs of staff act as the deputy directors of the Headquarters Department (*silingbu*). The Headquarters Department has various directly subordinate units such as a Combat Support Company (*zhanqin lian*), a vehicle company (*cheliang lian*), and a weather support station (*qixiang qinwuzhan*). The following second-level divisions have been noted at the MRAF headquarters-level, of which the four most important divisions are Operations, Military Affairs, Training, and Scientific Research:

- The General Office (*bangongshi*) has at least five subordinate offices as follows:
 - Documents Office (*danganke*)
 - Secretariat Office (*mishuke*)
 - Translation Office (*fanyishi*) performs the same functions as the Foreign Affairs Division at HqAF.
 - First Office (*yike*) is responsible for assisting the military commander and deputy commanders, past and present.
 - Second Office (*erke*)
- Political Division (*zhengzhichu*)
- Operations Division (*zuozhanchu*)
- Intelligence Division (*qingbaochu*)
- Scientific Research Division (*keyanchu*)
- Communications Division (*tongxinchu*)
- Training Division (*junxunchu*) incorporates the responsibility for schools, so there is no Schools Division
- Military Affairs Division (*junwuchu*)
- Equipment Division (*zhuangbeichu*)
- Radar Division (*leidachu/leidabingchu*)
 - Training Office (*xunlianke*)
- AAA/SAM Division (*gaopao daodanchu*) is also called the AAA Division (*gaopaochu*) in some MRAF headquarters. It incorporates SAM operations and technical matters. It has at least two offices.
 - Plans Office (*jihuake*)
 - Air Materiel office (*qicaike*)
- Administrative Division (*guanlichu*)

- The Air Traffic Control Division (*hangxingchu*) also has an Air Traffic Control Command Center (*zhihui zhongxin*)
- Navigation Division (*linghangchu*)
- Weather Office (*qixiangshi*)
- Confidential Division (*jiyaochu*)

MRAF Political Department

The Political Department (*zhengzhibu*) at the MRAF headquarters is organized as follows:

- The Secretariat Division (*mishuchu*) is the same as the General Office at HqAF.
- Party Affairs Division (*zuzhichu*)
- Cadre/Personnel Division (*ganbuchu*). While there are separate sanitoriums (*ganxiusuo*) for each of the first-level departments at HqAF, the Political Department's *ganbuchu* at the MRAF is responsible for all sanitoriums at the MRAF-level.
 - Welfare Office (*fulike*)
- The Propaganda Division (*xuanchuanchu*) is also responsible for cultural affairs. There is no Cultural Division. A Propaganda Branch (*xuanchuangu*) was noted within a radar regiment.
- Security Division (*baoweichu*)
- The Mass Works and Liaison Division (*qunlianchu*) combines the responsibilities of the HqAF's Mass Works Department and Liaison Department.

MRAF Logistics Department

Like HqAF's Logistics Department, the MRAF headquarters's Logistics Department (*houqinbu*) is organized like a command, including a chief of staff. The department also has a Party Committee and Standing Committee. The Beijing MRAF's Logistics Department (*houqinbu*) is located in a separate compound about one mile from Beijing MRAF Headquarters, but the Shenyang MRAF Logistics Department is co-located with the rest of the Shenyang MRAF Headquarters Departments. The MRAF Logistics Department also has directly subordinate training regiments (*xunlian tuan*), fuel depot regiments (*youliao tuan*), farms (*nongchang*), vehicle repair shops, and hospitals. The Nanjing MRAF has a Boat Group (*chuanting dadui*), which in turn has a Logistics Department (*houqinbu*). The following departments and divisions within the MRAF Headquarters's Logistics Department have been noted:

- Headquarters Department (*silingbu*)
 - Military Affairs Office (*junwuke*)
- General Office (*bangongshi*)
- Finance Division (*caiwuchu*)
- Health Division (*weishengchu*)

- Armament Division (*junxiechu*)
 - Plans and Finance Office (*jihua caiwuke*)
 - Aviation Munitions Office (*hangkong danyaoke*)
 - Avionics/Electronics Office (*dianzike*)
 - Radar Office (*leidake*)
 - Surface-to-Air Missile Office (*dikong daodanke*)
- Transportation Division (*yunshuchu*)
- Fuels Division (*youliaochu*)
- Airfield and Barracks Management Division (*jiyingchu*)
- Air Materiel Division (*hangcaichu*)

In addition to the above noted elements, the following elements also probably exist:

- Political Department (*zhengzhibu*)
- Administrative Office (*guanlike*)
- Audit Division (*shenjichu*)

MRAF Equipment Department

The following divisions within the MRAF headquarters's Equipment Department (*zhuangbei jishubu*) have been noted:

- Repair Division (*xiulichu*) is subordinate to the Field Maintenance Department at HqAF, and is responsible for intermediate-level aviation repair/overhaul facilities (*hangxiuchang/xiupeichang*). There is at least one of these facilities per Military Region.
- Factory Management Division (*gongguanchu*)
- Procurement Division (*dinghuochu*)
- Finance Division (*caiwuchu*)

AIR CORPS

Air corps (*jun*) are basically organized the same as the MRAF headquarters. The command staff consists of the following personnel:

Position	Rank
Commander (<i>junzhang</i>)	Major General
Political commissar	Major General
Deputy commander(s)	
Possible deputy political commissar	
Chief of staff	
Deputy chief(s) of staff	

There is a Party Committee and Standing Committee with the political commissar as the secretary of each. Although the commander works directly for the MRAF commander, he works through the MRAF's Operations Division (*zuozhanchu*) within the Headquarters Department.

The administrative organization consists of a Headquarters Department, Political Department, Logistics Department, and Equipment Department. Each of these departments have the same subordinate divisions (*chu*) as the MRAF. The department and division directors are senior colonels and colonels. The following organizations have been noted in the air corps headquarters, but probably has all of the same offices as the MRAF headquarters:

- Headquarters Department (*silingbu*)
 - Air Traffic Control Division (*hangxingchu*)
- Political Department (*zhengzhibu*)
- Logistics Department (*houqinbu*)
 - Air Materiel Division (*hangcaichu*)
 - Health Division (*weishengchu*)
- Equipment Department (*zhuangbei jisjubu*)

COMMAND POSTS

Between the late 1950s and mid-1980s, the PLAAF created at least twelve command posts (*zhihuisuo/junqu kongjun zhihuisuo*) located throughout China, which integrated aviation and air defense units to protect a particular area. These command posts had three separate origins – formed as new organizations, formed from previous air corps, or formed the PLAAF's regional headquarters prior to the reduction from eleven to seven military regions in August 1985. While some of them were downgraded or abolished, all of the command posts except for Lhasa were replaced after 1993 by a base (*jidi*) structure. Each of the command posts, except Lhasa, had the same status as an air corps. The Lhasa Command Post was created as a division-level organization but was later changed to a brigade-level.

One of the primary reasons command posts replaced air corps was to eliminate unnecessary administrative functions and to make the command post an operational (not an administrative) organization. As a result, the Political Department, Logistics Department, and Aeronautical Engineering Departments were all reduced to a Political Division, Logistics Division, and Maintenance Division, and placed directly under the Headquarters Department. Some command posts, such as Xian and Wuhan, did not have any directly subordinate aviation units, so they did not have a Maintenance Division. In addition, some of the administrative divisions (*chu*) present at the air corps or MRAF headquarters were eliminated at the command post. The appropriate MRAF headquarters took over responsibility for these administrative functions.

A typical command post had 50-100 personnel and controlled one or more aviation units, 1-3 radar regiments, 1-2 AAA regiments, and 1-2 SAM regiments. Some command posts also controlled a combined (AAA/SAM) brigade.

The command post's command staff and administrative organization is as follows:

Position	Rank
Commander (<i>silingyuan</i>)	Major General
Political commissar	Major General
One deputy commander	Senior Colonel
No deputy political commissar	
Chief of staff	Colonel

Administrative organization

- Headquarters Department (*silingbu*)
- Political Division (*zhengzhichu*)
- Logistics Division (*houqinchu*)
- Maintenance Division (*jiwuchu*)
- Operations Division (*zuozhanchu*)
- Intelligence Division (*qingbaochu*)
- Scientific Research Division (*keyanchu*)
- Equipment Division (*zhuangbeichu*)
- Military Affairs Division (*junwuchu*)
- Radar Division (*leidachu*)
- Communications Division (*tongxinchu*)
- AAA Division (*gaopaochu*)
- Administrative Division (*guanlichu*)
- Air Traffic Control Division (*hangxingchu*)
- Navigation Division (*linghangchu*)
- Confidential Division (*jiyaochu*)
- Weather office (*qixiangshi*)

Unlike the air corps, command posts do not have number designators. Instead, they take the name of their location, such as the Dalian Command Post. In addition, their names are usually shortened to two characters. For example, the *Dalian Zhihuisuo* is simply called *Dazhi*.

BASES

In 1993, bases (*jidi*) began replacing all of the command posts in response to the PLA's overall reduction in force.⁹⁴³ The only notable difference between a command post and a base is that a command post is equivalent in status to an air corps (*jun*), while a base is slightly lower in status and the commander is equivalent to an air corps deputy commander.⁹⁴⁴ The only exception was Lhasa which remains as a command post, because Lhasa's status was already lower than that of the other command posts. Unfortunately, there is virtually no information available about the structure of the base, but it can be assumed that they are almost identical to the command posts they replaced. Whereas the command posts were simply known by a two-character name, such as Shanghai's *Shangzhi*, the bases also use a two-character name such as *Shangji*.

⁹⁴³ Kongjun da cidian, p. 147.

⁹⁴⁴ Interview with PLA officials.

APPENDIX F. PLAAF BRANCHES, TROOPS, AND SUPPORT UNITS

Aviation Troops

A typical aviation division headquarters consists of the command staff and administrative organization.⁹⁴⁵ These people/organizations are responsible for combat and training, political training, supply, and maintenance support for the division. Each division and regiment has a Party Committee and a Standing Committee, of which the political commissar is the secretary. The command staff consists of the following:

Position	Rank
Commander	Senior Colonel
Political commissar	Senior Colonel
2 deputy commanders	Senior Colonel/Colonel
Deputy political commissar -	None
Chief of staff	Colonel
1-2 deputy chiefs of staff	Colonel

The air division's first-level administrative organization is as follows:

- Headquarters Department (*silingbu*)
- Political Department (*zhengzhibu*)
- Field station (*changzhan*)
- Maintenance Division (*jiwuchu/gongcheng jiwuchu*)

The second-level administrative structure for an air division's Headquarters and Political Department are not available, but it is probably very similar to the MRAF headquarters, but the divisions (*chu*) are probably at the office (*ke*) level. The following notional structure probably exists. The chief of staff acts as the director and the deputy chief of staff acts as the deputy directors of the Headquarters Department (*silingbu*). The Headquarters Department has various directly subordinate units for combat support, vehicles, and weather support. Second-level administrative elements probably include the following:

- The General Office (*bangongchu*)

⁹⁴⁵ Unless specified, the information in this appendix was taken from Allen, 1991. See also *Kongjun da cidian*; Yao Jun; and Xin Ming.

- Political Office (*zhengzhike*)
- The Operations Office (*zuozhanke*)
- Intelligence Office (*qingbaoke*)
- Communications Office (*tongxinke*)
- The Training Office (*junxunke*)
- Military Affairs Office (*junwuke*)
- Equipment Office (*zhuangbeike*)
- Radar Office (*leidake/leidabingke*)
- Administrative Office (*guanlike*)
- The Air Traffic Control Office (*hangxingke*)
- Navigation Office (*linghangke*)
- Weather Office (*qixiangshi*)
- Confidential Office (*jiyaoke*)

The Political Department (*zhengzhibu*) at the air division headquarters is probably organized as follows:

- The Secretariat Division (*mishuchu*) is the same as the General Office at HqAF and the MRAF headquarters.
- Party Affairs Office (*zuzhike*)
- Cadre/Personnel Office (*ganbuke*)
- The Propaganda Office (*xuanchuanke*)
- Security Office (*baoweike*)
- The Mass Works and Liaison Office (*qunlianke*)

An air division normally has two to three flying regiments (*feixing tuan*), and if the regiments are located at different airfields, each airfield has a field station (*changzhan*) for logistics support. The flying regiment, each of which has a set number of 25-32 aircraft, is the basic organization for training and operations. Each regiment has three flying groups (*feixing dadui*), which are always numbered the 1st, 2nd, and 3rd, and one Maintenance Group (*jiwu dadui*). Each flying group has three flying squadrons (*feixing zhongdui*).

The division has an aircraft-to-pilot ration of about 1:1.5 . Although the pilots are assigned to squadrons, each with three to five pilots, the aircraft are assigned to the regiment as a whole, not just to the squadrons. Each pilot, however, normally only flies one to three airframes, so they become familiar with each aircraft's handling capabilities. The average pilot remains in the Air Force until he or she retires. The PLAAF established age limits for its pilots in the 1980s: fighter and ground-attack pilots, 43-45 years; bomber pilots, 48-50 years; transport pilots, 55 years; helicopter pilots, 47-50 years; and female pilots, 48 years. The average fighter and ground-attack pilot is 28 years old.

The field station (*changzhan*) is an independent logistics support unit under dual leadership of the air division and the MRAF headquarters. Prior to February 1970, the field station was called a base (*jidi*), and had the status of a division. Today, it has the status of a regiment. The field station is responsible for organizing and supplying material and equipment, and also for providing continuous combined service support for operations and training. A field station at an airfield supporting two fighter regiments has about 930 personnel, including 170 officers and 760 airmen. Each airfield housing aircraft assigned to the division has its own field station. The officers are graduates of PLAAF academies and technical schools. The field station is organized into a command staff, Party Committee, Headquarters Department, Political Division, administrative branches, and support companies as follows:

Command staff

- Chief (*changzhang*)
- Political Commissar
- Chief of Staff
- Director, Political Division

Administrative branches

- Air Materiel Branch (*hangcaigu*)
- Armament Branch (*junxiegu*)
- Quartermaster Branch (*junxugu*)
- Finance Branch (*caiwugu*)
- Transportation Branch (*yunshugu*)
- Housing Branch (*yingfanggu*)
- Runway Maintenance Branch (*xiujiangu*)

Support companies

- Vehicles Company (*qiche lian*)
- Instrument Company (*qizhan lian*)
- Field Service Company (*changwu lian*)
- Communications Company (*tongxin lian*)
- Four Stations Support Company (*sizhan qinwu lian*)
- Security Company (*jingwei lian*)
- Fuel Transport Company (*yunyou lian*)
- Plus six other unidentified companies

The air division's maintenance workshops/backshops (*xiulichang*) are responsible for intermediate repair of the division's aircraft and periodic inspections under 400 hours, general malfunction repair and overall repair, specialized parts inspection and repair, and repairing of certain spare parts. All the technical equipment for maintenance is organized into ground equipment and instruments, and instruments and equipment onboard engineering vehicles. A

typical repair shop department (*changbu*) consists of six flights (*fendui*) and their respective sections (*zu*).

The Maintenance Group (*jiwu dadui*) performs flight line maintenance on the division/regiment's aircraft. A typical Maintenance Group is organized as follows into four squadrons (*zhongdui*) and their subordinate flights.

AAA AND SAM TROOPS

Prior to 1966, HqAF's Headquarters Department had a AAA Command Department (*gaopao zhihuibu*), which was responsible for AAA, and a Technical Department (*jishubu*), which was responsible for SAMs. In 1966, the two departments merged. Today, the AAA Department (*gaopaobu*) is administratively responsible for AAA and SAMs.

AAA troops (*gaoshepao bing/gaopao bing*) are operationally organized as part of a Combined (SAM/AAA) Brigade (*huncheng lu*) and/or into regiments (*tuan*), battalions (*ying*), companies (*lian*), squads (*pai*), and platoons (*ban*). Previously, there were AAA Divisions (*shi*), but they were all converted to brigades in the late 1980s. AAA regiments which are not part of a Combined Brigade have the status of an independent regiment and are therefore equal to a division (*shi*). Each regiment has 2-3 battalions; each battalion has 3-5 companies; each company has three AAA squads plus support (vehicle, maintenance, logistics, etc.) squads; each squad has 3-6 platoons; and each platoon has one AAA piece.

The AAA regiment's command staff consists of the commander, political commissar, one deputy commander, the chief of staff, and the director of the Political Division. The chief of staff and Political Division director are of equal status. The regiment's headquarters is organized administratively into a Headquarters Department, Political Division, Logistics Division, and Maintenance Division (*jishuchu*). There is also a Party Committee and Standing Committee.

The AAA Academy (*gaopao xueyuan*) opened in 1952 in Shanghai (it was only a school/*xuexiao* at that time). It closed down for a period of time during the Cultural Revolution, and then re-opened in 1978 in Guilin. The students study for two years, and are then sent to an operational unit for one year of training before they receive their commission. The academy had 1,100 students in 1988.

The PLAAF's SAM troops (*didao/daodan/dikong daodanbing*) began when China received its first SA-2 missiles (five launchers and 62 missiles) from the Soviet Union in October 1958. At the same time, the Air Force established its missile school at Sanyuan, Hebei Province, and the first SAM battalion near Beijing. The first units borrowed people from the AAA, radar, aviation maintenance, and spotlight troops. For security purposes, the SAM department in HqAF was called the Technical Department (*jishubu*) until 1966, when it was combined with the AAA Department.

A SAM regiment's command staff has a commander, political commissar, one deputy commander, a chief of staff, and the director of the Political Division. The political commissar chairs the Party Committee and Standing Committee, and each battalion has a representative on the Party Committee. Like a AAA regiment, a SAM regiment's administrative organization consists of a Headquarters Department, Political Division, Logistics Division, and Maintenance

Division. Each SAM regiment has 1-3 battalions, and each battalion has six launchers plus various support companies, such as command and control, logistics, maintenance, radar, etc.

The AAA/SAM Combined Brigades that were established beginning in 1985 eliminated the regiment-level completely, but kept the rest of the AAA and SAM organization in tact, so that the chain of command goes directly from the brigade to the battalion. Each brigade has 5-6 battalions, including 2-3 AAA and 2-3 SAM battalions.

The brigade's administrative organization consists of a Headquarters Department, Political Department, Logistics Department, and Maintenance Department (*jishubu*). The Maintenance Department may have been replaced by an Equipment Department beginning in 1998. Each brigade and regiment has a Party Committee and Standing Committee, of which the political commissar is the secretary. The Party Committee also has one representative from each battalion.

Prior to 1998, the HqAF's Equipment Department was responsible for aircraft maintenance and the Logistics Department's Armament Department/ Division at the HqAF, MRAF, and -level was responsible for SAM and AAA maintenance. At the brigade and regiment-level, the Maintenance Department and Division, respectively, are separate entities from the Logistics Department and Division, but are still responsible to the higher headquarter's Logistics Department's Armament Division/Office and work closely with the brigade/regiment's Logistics Department/ Division. It is not clear whether or not the Logistics Department transferred the responsibility for all weapons maintenance to the Equipment Department in 1998.

In each Command Post/Base/ and the MRAF headquarters, there is a AAA/SAM Division (*gaopao daodanchu*) or AAA Division (*gaopaochu*) that is primarily responsible for the brigades' day-to-day technical matters. The brigade works with the next higher level's Operations Division/Department for operational matters, and with the respective Logistics and Training Divisions/Departments for those aspects.

RADAR TROOPS

The first radar battalion was established in April 1950 in Nanjing, but was called a Telecommunications Group (*dianxun dadui*) for security purposes. It had five squadrons (*zhongdui*). The second battalion was established in Shanghai as part of the Shanghai Air Defense Headquarters in May 1950. The first regiment was formed in 1955, and the name Radar Troops (*leidabing*) became official on 26 July 1957.

Once the PLA Air Defense Force (*fangkongjun*) was established in December 1950, radar units were divided into two types. Those subordinate to the Air Defense Force were responsible for early warning, and those subordinate to the PLAAF were responsible for directly supporting aviation units.

Initially, Air Defense Force warning radar sites (*jingjie leida zhan*) reported the information to a battalion station (*ying zhan*) or a regimental station (*tuan zhan*). Once the information was synthesized, it was forwarded to the MR Air Defense Force Headquarters General Station (*junqu fangkongbu zong fen zhan*). Finally, the General Station reported the information to the appropriate unit. At that time, all of the PLAAF units' radar sites were

subordinate to the Communications Department (*tongxinbu*), which was a HqAF first-level administrative department.

In September 1957 (after the PLAAF and Air Defense Force merged), the HqAF Aircraft Reporting Command Department (*duikong qingbaobing zhihuibu*) was renamed the Radar Department (*leidabingbu*) and was directly subordinate to the PLAAF commander. In addition, the MRAF Headquarters Department's Aircraft Reporting Command Division (*zhihuichu*) was also renamed the Radar Department (*leidabingbu*) and became directly subordinate to the MRAF commander.

In 1959, radar sites were established as the basic unit, while regiments became the highest unit. At that time, the sites and regiments could have also had a Reporting Battalion Headquarters (*qingbao ying bu*) or an Administrative Battalion Headquarters (*guanli ying bu*) between them, depending upon the situation. As a result, the radar organization could have had either a three level Regiment-Battalion-Site or a two level Regiment-Site structure. In the early 1960s, this changed so that there was only a three level structure.

The PLAAF Radar Academy is in Wuhan, and had graduated over 7,800 cadets by the end of 1987. There were 510 cadets in the 1989 graduating class. By the end of 1987, over 1200 technicians and platoon commanders had been trained at MRAF training units. For example, there is a Radar Troop Training Group (*xunlian dadui*) in the Chengdu MRAF.

Today, Radar Troops are organized into brigades, regiments, battalions, and companies/sites. Each regiment has various battalions, including one information (*qingbao*) battalion and up to twenty-five radar companies/sites. Each company/site has 2-3 radars assigned.

The regiments that are not subordinate to a brigade have the status of independent regiments, and are therefore equal in status to a division (*shi*). A radar regiment's command staff consists of the commander, political commissar, deputy commander(s), chief of staff, and director of the Political Division. The regiment also has a Party Committee and Standing Committee, of which the political commissar is the secretary.

The regiment's administrative organization consists of a Headquarters Department, Political Division, Logistics Division, and a Maintenance Division (*jishuchu*). The Maintenance Division is equal to the Logistics Division at the regiment-level, but works for the higher headquarter's Logistics Department. The Logistics Division has subordinate branches, such as the Quartermaster Branch. One Political Division has a Propaganda Branch.

Radar regiments are subordinate to the Radar Division (*leidachu*) within the next higher headquarters-level for day-to-day technical matters, to the Operations Division (*zuozhanchu*) for operational matters, and to the Training and Logistics Divisions for those functions.

AIRBORNE TROOPS

In July 1950, the Military Commission established the Air Force Marines (*kongjun luzhan*) First Brigade in Shanghai. The cities of Kaifeng and Zhengzhou in Henan Province were designated as the brigade's training bases. On 1 August, the brigade's headquarters moved to Kaifeng. Thereafter, the unit's designation changed several times, becoming the Air Force

Marine First Division, the Paratroops Division (*sanbing shi*), then the Airborne Division (*kongjiangbing shi*).

Today, China's airborne troops (*kongjiangbing*), known as the PLAAF's 15th Air Army (*kong 15 jun*), consists of three airborne divisions, each with about 10,000 troops,⁹⁴⁶ which are further divided into battalions and companies. According to an October 1993 *Jane's Defence Weekly* report, China began changing the 15th Airborne Army's three brigades into divisions, in order to boost their rapid-response power.⁹⁴⁷ The 43rd Brigade, based in Kaifeng, was the first brigade to undergo expansion to a division. The other two brigades, the 44th at Yingshan and 45th at Huangpi, followed suit shortly thereafter. Military planners had apparently decided that brigade-size forces were too small for their assigned combat missions. Chinese brigades normally have about 3,000 to 4,000 troops. The airborne units are composed of eight types of troops: scouts, infantry, artillerymen, signalmen, engineers, antichemical warfare corps, and automobile corps.

Administratively, HqAF does not have a separate Airborne Department, so the Operations Department is responsible for most of the airborne troops' operational requirements. In addition, HqAF's Training Department has an Airborne Division (*kongjiangbingchu*), which is responsible for training.

Operationally, the 15th Airborne Army works closely with other PLAAF branches. For example, during the 1979 border conflict with Vietnam, three of the 15th Airborne Army's light artillery battalions were subordinated to the PLAAF's 19th AAA Division's 55th Regiment at Ningming.

COMMUNICATIONS TROOPS

PLAAF communications consists of communications and navigation aids, while Communications Troops (*tongxinbing*) are organized into administrative elements, as well as regiments, battalions, stations (*zhan*), companies, teams (*dui*), equipment repair factories (*qicai xiupei chang*), and equipment warehouses (*qicai cangku*). The PLAAF Communications School was established in September 1957 in Xian.

The regimental command staff has at least a commander, political commissar, and a chief of staff. The regiment also has a Party Committee and Party Standing Committee. The regiment's administrative organization consists of a Headquarters Department, Political Division, and Logistics Division. Unlike radar, SAM, and AAA regiments, which have a separate Maintenance Division (*jishuchu*), the communications regiment's Logistics Division is responsible for maintenance. A typical communications regiment consists of about 1600 personnel.

Each MRAF headquarters has a communications battalion and subordinate transmitter company. The battalion also has subordinate receiver companies (*shouxi*

⁹⁴⁶ 1999 DoD Taiwan Strait Report.

⁹⁴⁷ "PLA Airborne Brigades Become Divisions," *Jane's Defence Weekly*, Vol 20, No. 14, 2 October 1993, p. 12.

lian), each of which has operator platoons (*baowu pai*). Each operator has one transmitter, which is networked to a receiver company at an air corps, air division, or supply station.

LOGISTICS TROOPS

The PLAAF's Logistics Department (*houqinbu/konghou*) was established in November 1949. It is responsible for supply, as well as support for operations, training, and living. The PLAAF's logistics troops (*houqinbing*) are organized operationally to carry out the policies of the Logistics Department. Consequently, they are responsible to the HqAF Logistics Department and its subordinate offices at the MRAF, air corps, command post/base, and unit-level. The Field Station (*chang zhan*) is the logistics organization at an aviation division/base. The Air Force's Logistics Department has its own water transport craft and boat troops to ship fuel to PLAAF units along the Yangzi River and coast.

Looking at how the PLAAF's logistics troops are organized today, the air materiel organization at each level manages supply depots and warehouses, and orders the supplies. Supply depots are organized on a three tier structure -- first level (*yiji*) depots are located in various military regions but are subordinate to HqAF (The Lanzhou MRAF does not have any first level depots, but has second level depots at Xian, Wulumuqi, and the HeXi corridor); second level (*erji*) depots are located in each military region and are subordinate to the MRAF Headquarters; and third level (*sanji*) depots are located at and subordinate to operational units. First level depots can either supply the second level depots or send items directly to the unit if necessary. The PLAAF's first level air materiel depots are directly subordinate to the Logistics Department Headquarters, but are functionally (*yewu*) responsible to the Plans Division within the Air Materiel Department.

First level depots have a director, political commissar, two deputy directors, a General Office, Political Division, and Administrative Division. The main depot is divided into six sub-depots, one oil preservation shop, and one combined service company. Each sub-depot has a director, the oil preservation shop has a shop director, and the combined service company has a director and political commissar. The depot employs about 230 people.

A first level depot's main task is to ensure the supply of air materiel to aviation units in its region. The missions include the following:

- Store, inspect, and maintain materiel
- Supply mission capable (MICAP) items needed urgently
- Technical development, depot management, and depot safety

At an aviation division/base, the field station is an independent logistics support unit under dual leadership of the Air Division and the MRAF Headquarters' Logistics Department's Air Materiel Division (*hangcaichu*). It is responsible for organizing and supplying material and equipment, and also to provide continuous combined service support for operations and training.

There are several engineering units (*gongchengbing zongdui*) that are closely associated with the construction department, but are directly subordinate to the Logistics

Department. These units are equivalent to a corps/army (*jun*) or a division (*shi*) and have several subordinate Engineering Divisions (*jianzhu gongchengchu*), Groups (*dadui*), and construction materiel compounds. From June-November 1950, the PLAAF selected seven army engineering companies from throughout China and organized them into five Airfield Construction Engineering Groups (*jichang xiujian gongcheng dadui*). Each Group, consisting of 620 people, had one subordinate Engineering Company (*gongbing lian*) and two Airfield Engineering Companies (*jichang gongcheng lian*). In January 1951, they were officially named the PLAAF 1st, 2nd, 3rd, 4th, and 5th Engineering Groups. In May 1951, the 6th Engineering Group was formed in the Xinan Military Region. In 1962, the 7th *zongdui* was involved in construction projects in Chengdu.

During the late 1980s, these engineering units were used for building PLAAF facilities, but also contract out for civilian projects, such as bridges, roads, buildings, and airfields. For example, the 8th Engineering *zongdui* repaired/expanded airfields in Dandong, Dalian, Qiqihar, and Xinjiang. It also built the new Shenyang Taoxian airfield from November 1986 to November 1988. Once this project was over, the *zongdui* was reduced from 9,000 personnel to an Engineering Division (*chu*) with 300 personnel, and consequently had its status downgraded from that of a corps to a regiment. This move was taken as part of the overall reduction of forces. Most of the remaining people have become civil service personnel. The current status of all eight *zongdui* is not known.

APPENDIX G. ORIGINS OF PLAAF MRAFS, AIR CORPS, COMMAND POSTS,

BASES, AIR DIVISIONS, AND INDEPENDENT REGIMENTS

Military Region Air Forces

The PLAAF's military region air forces (MRAFs) are designated as operational (*zhanyi*) *juntuan* organizations.⁹⁴⁸ While they belong to the PLAAF, they are under the dual leadership of the PLAAF and the military region leadership. The MRAF's primary responsibility is territorial air defense and support for ground and naval operations.

Beijing MRAF: In October 1950, the Huabei MRAF Headquarters was formed from the Huabei MR Aviation Division (*hangkongchu*).⁹⁴⁹ In May 1954, it was renamed the Huabei Air Force Department (*kongjunbu*). In May 1955, it was renamed the Beijing MRAF. In June 1957, the Beijing MRAF and Beijing MR Air Defense Force were merged into a combined air defense system, covering Hebei, Shanxi, Neimenggu, Beijing, and Tianjin. Beijing MRAF commanders have included, Xu Decao, Duan Suhan, Luo Yuanfa, Li Jitai, Liu Yuti, Yao Xian, Lin Jigui, Ma Zhanmin, Qiao Qingchen, and Li Yongjin.

Chengdu MRAF: The Chengdu MRAF's origins came from the Xinan MR Headquarters Aviation Division, which was created in January 1950 in Chongqing.⁹⁵⁰ In September 1950, the Xinan MRAF was established using the Aviation Division as a base, with Fu Chuanzuo as the commander. In order to control aviation forces and support ground forces entering Tibet, the Xinan MRAF was moved to Chengdu in September 1950. In June 1955, the Xinan MRAF was abolished. The existing forces were transferred to the Lanzhou MRAF. In August 1960, the Kunming MRAF CP was created, and in October 1965 the Chengdu MRAF CP was also created. In April 1976, the Kunming MRAF CP became the 5th Air Corps and the Chengdu MRAF CP became the 8th Air Corps. In November 1978, the 5th Air Corps was renamed the Kunming MRAF CP, and the 8th Air Corps was renamed the Chengdu MRAF CP. At that time, the Chengdu MRAF CP was responsible for Yunnan, Guizhou, Sichuan, and Tibet (forces in Tibet were transferred from the Lanzhou MRAF in 1969). In September 1985, the Kunming MRAF CP and the Chengdu MRAF CP were merged and reorganized as the Chengdu MRAF. Since 1985, the Chengdu MRAF's commanders have included Hou Shujun, Xie Decai, and Huang Hengmei.

⁹⁴⁸ *Zhongguo junshi baike quanshu*, Volumes 7-9.

⁹⁴⁹ *Ibid.*, Volume 7, p. 75.

⁹⁵⁰ *Ibid.*, Volume 7, p. 383.

Fuzhou MRAF: In July 1958, the CMC decided to move aviation troops into Fujian for air defense of the southeast coast.⁹⁵¹ At the end of July, the Fuzhou MRAF was created at Jinjiangxian, using officers from the Nanjing MRAF, 1st Air Corps, and 5th Air Corps as the core. In June 1960, the headquarters was moved to Fuzhou, and was responsible for Fujian and Jiangxi. In September 1985, the Fuzhou MRAF was merged into the Nanjing MRAF. From 1958-1985, over 130 aviation regiments have been deployed or stationed in the Fuzhou MRAF. Commanders of the Fuzhou MRAF included Nie Fengzhi, Chen Huatang, Xie Bin, Yang Silu, and Hou Shujun.

Guangzhou MRAF: In September 1950, the Zhongnan MRAF was established in Wuhan from the Zhongnan MR Aviation Division.⁹⁵² In October 1950, the Zhongnan MRAF was created. In May 1954, the Zhongnan MRAF changed its name to the Zhongnan MR Air Force Department. In July 1955, the Air Force Department was moved to Guangzhou and renamed the Guangzhou MRAF. Forces that were stationed in Hubei and Henan were transferred to the Wuhan MRAF. In May 1957, the Guangzhou MRAF and Guangzhou MR Air Defense Force were merged into a combined air defense system. When the Wuhan MRAF was abolished in September 1985, the PLAAF units in Hubei were transferred to the Guangzhou MRAF. After September 1985, the Guangzhou MRAF included Guangdong, Hainan, Guangxi, and Hubei. Commanders of the Guangzhou MRAF have included Liu Zhen, Cao Lihuai, Wu Fushan, Wang Pu, Wang Hai, Yu Zhenwu, Wu Jiyuan, Liu Heqiao, Yang Zhenggang, and Han Ruijie.

Jinan MRAF: In September 1967, the Jinan MRAF was created in Jinan, Shandong Province, from the 6th Air Corps and portions of the Beijing MRAF headquarters.⁹⁵³ The Jinan MRAF covered only Shandong. When the Wuhan MRAF was abolished in 1985, the Jinan MRAF added Henan to its area of responsibility. Jinan MRAF commanders have included Wu Chongxian, Wang Zixiang, Lin Jigui, Wu Guangyu, Han Ruijie, and Guo Yuxiang.

Lanzhou MRAF: In May 1952, the Xibei MRAF was created in Lanzhou using the 6th Army and the Xibei MR Aviation Division as the core.⁹⁵⁴ Shortly thereafter, the headquarters moved to Xian. In May 1954, the name was changed to the Xibei MRAF, and in May 1955 changed again to the Lanzhou MRAF, covering Shaanxi, Gansu, Ningxia, Qinghai, and Xinjiang. When the Lanzhou MRAF was established, it included Sichuan and Tibet, but they were transferred to the Chengdu MRAF CP in 1965 and 1969, respectively. Lanzhou MRAF commanders have included Luo Yuanfa, Yang Huanmin, Liu Maogong, Xu Dengkun, Liu Zhitian, Sun Jinghua, Ma Zhanmin, Liu Shunyao, Li Yongde, and Ma Xiaotian.

⁹⁵¹ Ibid., Volume 7, p. 338.

⁹⁵² Ibid., Volume 7, p. 383.

⁹⁵³ Ibid., Volume 7, p. 492.

⁹⁵⁴ Ibid., Volume 8, p. 659.

Nanjing MRAF: In August 1950, the Nanjing MRAF was created from the Huadong MR Aviation Division.⁹⁵⁵ In September, the headquarters moved to Shanghai and merged with the Shanghai Air Defense Headquarters, changing the name to the Huadong MRAF and simultaneously the Shanghai Air Defense Headquarters. In November 1954, the name changed to the Huadong MR Air Force Department. In June 1955, the name changed again to the Nanjing MRAF. In September 1957, the Nanjing MR Air Defense Forces merged into the Nanjing MRAF. In July 1958, the Fuzhou MRAF was created at Jinjiangxian, using officers from the Nanjing MRAF, 1st Air Corps, and 5th Air Corps as the core. In September 1985, the Fuzhou MRAF merged back into the Nanjing MRAF, covering Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, and Shanghai. Commanders of the Nanjing MRAF have included Nie Fengzhi, Cheng Huatang, Liu Maogong, Yang Huanmin, Yuan Bin, Jiang Yutian, Sun Jinghua, Xie Decai, and Lu Denghua.

Shenyang MRAF: In July 1950, the Dongbei MRAF was created using the Dongbei MR Aviation Division as the core.⁹⁵⁶ In May 1954, the name was changed to the Dongbei MRAF, and in April 1955 it was changed again to the Shenyang MRAF. In May 1957, the Shenyang MR Air Defense Force was merged into the Shenyang MRAF. The Shenyang MRAF covered Liaoning, Jilin, and Heilongjiang. Commanders have included Duan Suquan, Liu Zhen, Zhou Chiping, Cao Guohua, Wang Yuhuai, Cao Shuangming, Xin Dianfeng, Hu Denghua, Zheng Shenxia, and Xu Qiliang.

Wuhan MRAF and Base: The Wuhan MRAF was created in July 1955 from the merger of the Xinan MRAF and PLAAF's Guangzhou CP, covering Henan and Hubei.⁹⁵⁷ In September 1985, the Wuhan MRAF was abolished and replaced by the Wuhan CP (*Wuhan zhihuisuo*).⁹⁵⁸ The name was changed to the Wuhan Base (*Wuhan jidi/Wuji*) sometime after 1993.⁹⁵⁹ Forces in Henan were transferred to the Jinan MRAF, and those in Hubei were subordinated to the Guangzhou MRAF. Commanders of the Wuhan MRAF included Fu Chuanzuo, Liu Cunxin, Li Yongtai, and Wu Jiyuan.

Air Corps, Command Posts, and Bases

1st Air Corps: The 1st Air Corps (*kong 1 jun*) was established in Changchun, Jilin Province, probably in November 1951. During preparations to liberate Taiwan in the fall of 1958, the PLAAF moved the core staff of the 1st Air Corps to Jinjiang, Fujian

⁹⁵⁵ Ibid., Volume 8, p. 865.

⁹⁵⁶ Ibid., Volume 8, p. 1018.

⁹⁵⁷ Ibid., Volume 9, p. 1239.

⁹⁵⁸ Allen, 1991, Section 12.

⁹⁵⁹ *Directory of PRC Military Personalities*, Hong Kong: Defense Liaison Office, US Consulate General, October 1995, p. 50. *Zhongguo Kongjun*, p. 28.

Province, in July 1958. In October 1958, the 1st Air Corps was reestablished in Changchun with a new commander⁹⁶⁰ and still exists today.

2nd Air Corps: The 2nd Air Corps (*kong 2 jun*) was established in November 1951 at Andong, Liaoning Province,⁹⁶¹ and was later abolished. It was not replaced by a command post.

3rd Air Corps, Dalian Command Post and Base: The 3rd Air Corps (*kong 3 jun*) was originally formed at Kaiyuan Liaoning Province, in November 1951,⁹⁶² changed to the Dalian CP (*Dalian zhihuisuo/Dazhi*) probably in 1985⁹⁶³ and changed again to the Dalian Base (*Dalian jidi/Daji*) sometime after 1993.⁹⁶⁴

4th Air Corps, Shanghai Command Post and Base: The 4th Air Corps (*kong 4 jun*) was established in Shanghai in August 1952,⁹⁶⁵ changed to the Shanghai CP (*Shanghai zhihuisuo/Shangzhi*) probably as early as 1985,⁹⁶⁶ and changed again to the Shanghai Base (*Shanghai jidi/Shangji*) sometime after 1993.⁹⁶⁷

5th Air Corps: The 5th Air Corps (*kong 5 jun*) was established in Weifang, Shandong Province, in August 1952,⁹⁶⁸ but was noted in Hangzhou in 1954 until April 1976, when it was abolished.⁹⁶⁹ At that time, the 5th Air Corps command staff was moved to Kunming and the Kunming MRAF CP was renamed the 5th Air Corps.⁹⁷⁰ In November 1978, the 5th Air Corps was renamed the Kunming MRAF CP.⁹⁷¹ The 5th Air Corps apparently disappeared for good in 1978.⁹⁷²

6th Air Corps, Jinan MRAF, Tangshan Command Post and Base: The 6th Air Corps (*kong 6 jun*) was established at Yangcun, Hebei Province, in March 1956, but moved to Weifang, Shandong Province, in June 1956.⁹⁷³ In September 1967, the 6th Air Corps moved to Jinan, Shandong Province, and formed the basis for the Jinan MRAF

⁹⁶⁰ Yao Jun, p. 659.

⁹⁶¹ Ibid., p. 657.

⁹⁶² Ibid.

⁹⁶³ Allen, 1991, Section 12.

⁹⁶⁴ 1999 Directory, p. 54.

⁹⁶⁵ Yao Jun, p. 657.

⁹⁶⁶ Allen, 1991, Section 12.

⁹⁶⁷ 1996 Directory, p. 46.

⁹⁶⁸ Yao Jun, p. 657.

⁹⁶⁹ Ibid., p. 666.

⁹⁷⁰ Ibid., *Encyclopedia*, p. 160.

⁹⁷¹ Yao Jun, p. 667; *Encyclopedia*, p. 160.

⁹⁷² Interview with PLA officials.

⁹⁷³ Yao Jun, p. 659.

(*Jinan junqu kongjun/Jikong*).⁹⁷⁴ During December 1968, the 6th Air Corps was recreated in Tangshan, Hebei Province,⁹⁷⁵ and was noted in 1976 during the earthquake. At an unidentified later time, the 6th Air Corps changed its name to the Tangshan CP (*Tangshan zhihuisuo/Tangzhi*).⁹⁷⁶ The name was changed to Tangshan Base (*Tangshan jidi/Tangji*) sometime after 1993.⁹⁷⁷

7th Air Corps: In November 1959, the Shantou CP (*Shantou zhihuisuo/Shanzhi*) was established in Chenghai, Guangdong Province, but moved to Xingning, Guangdong Province, in 1960.⁹⁷⁸ At some point after 1960, another Shantou CP was apparently established. In June 1962, the second Shantou CP became the 7th Air Corps (*kong 7 jun*).⁹⁷⁹ Sometime after that, the 7th Air Corps moved to Xingning, Guangdong Province. In August 1964 the 7th Air Corps moved to Nanning, Guangxi Autonomous Region,⁹⁸⁰ where it still exists today.⁹⁸¹

8th Air Corps, Fuzhou MRAF, Fuzhou Command Post, Jinjiang Command Post: The PLAAF has changed its command organizations in Fuzhou several times since the mid-1950s, and provides one of the most difficult situations to understand. In September 1955, the PLA Air Defense Force's 1st Corps (*fangkongjun diyi jun*) was established in Fuzhou, Fujian Province. Following the Air Defense Corps' merger with the PLAAF in 1957, the 1st Corps was replaced in July 1958 by the Fuzhou MRAF (*Fuzhou junqu kongjun/Fukong*), which was formed at Jinjiang, Fujian Province, from a core of the 1st Air Corps (Changchun) and organized to command Fujian and Jiangxi PLAAF units in preparation to liberate Taiwan.⁹⁸² In February 1960, the PLAAF established the Fuzhou CP (*Fuzhou zhihuisuo/Fuzhi*) in Fuzhou City.⁹⁸³ In June 1960,

⁹⁷⁴ Ibid. p. 664.

⁹⁷⁵ Ibid. p. 664.

⁹⁷⁶ Allen, 1991, Section 12.

⁹⁷⁷ *Zhongguo Kongjun* p. 27.

⁹⁷⁸ Yao Jun, p. 660. The command post was upgraded to a corps-level organization in April 1965 as the United States' involvement in Vietnam increased. The command post commander was Lin Hu, who was former PLAAF commander Wang Hai's regiment commander during the Korean War. He was a division commander during the 1958 Taiwan Straits crisis, a deputy commander in the Guangzhou MRAF under Wang Hai, and a deputy commandant of the PLAAF Command Academy. He became a PLAAF deputy commander under Wang Hai in September 1985.

⁹⁷⁹ Ibid., p. 661.

⁹⁸⁰ Ibid., p. 662.

⁹⁸¹ The author visited the 7th Air Corps in 1989.

⁹⁸² Ibid., p. 659.

⁹⁸³ Ibid., p. 660.

the MRAF and command post staffs exchanged locations, and the Fuzhou CP changed its name to the Jinjiang CP (*Jinjiang zhihuisuo/Jinzh*).⁹⁸⁴

In June 1962, the Jinjiang CP changed its name to the 8th Air Corps (*kong 8 jun*).⁹⁸⁵ In April 1976, the 8th Air Corps, then located in Zhangzhou, Fujian Province, was abolished,⁹⁸⁶ but was immediately reconstituted in Chengdu when it replaced the Chengdu MRAF CP. In November 1978, the 8th Air Corps was replaced by the Chengdu MRAF CP.⁹⁸⁷ At some point after 1978, the 8th Air Corps moved from Chengdu to Fuzhou, Fujian Province. When the Fuzhou MRAF Headquarters was abolished in August 1985, the 8th Air Corps became the primary PLAAF command authority and still exists today.

9th Air Corps, Xinjiang/Wulumuqi Command Post: In November 1964, the 9th Air Corps (*kong 9 jun*) was established in Wulumuqi, Xinjiang Autonomous Region, and in November 1978 changed to the Xinjiang MRAF CP (*Xinjiang junqu kongjun zhihuisuo/Xinzh*).⁹⁸⁸ On 16 April 1979, the name was changed to Wulumuqi MRAF CP (*Wulumuqi junqu kongjun zhihuisuo/Wuzhi*).⁹⁸⁹ The 9th Air Corps was again noted in Xinjiang (probably Wulumuqi) as early as 1993.⁹⁹⁰ Furthermore, no reference has been seen to the Wulumuqi CP since then. Most likely, the 9th Air Corps was re-established to replace the Wulumuqi CP, possibly as early as August 1985 when the PLA reduced its eleven military regions into seven, including the merger of the Xinjiang MR into the Lanzhou MR.

10th Air Corps: The 10th Air Corps (*kong 10 jun*) was established in January 1969 at Datong, Shanxi Province, and still exists today.⁹⁹¹

11th Air Corps, Xian Command Post and Base: The 11th Air Corps (*kong 11 jun*) was established in June 1969 in Hetian, Xinjiang Autonomous Region, and replaced the Lanzhou MRAF Headquarters at Xian, Shaanxi Province, when the Lanzhou MRAF (*Lanzhou junqu kongjun/Lankong*) headquarters moved from Xian to Lanzhou, Gansu Province in November 1969.⁹⁹² The 11th Air Corps was replaced by the Xian CP (*Xian*

984 Ibid.

985 Ibid., p. 661.

986 Ibid., p. 666.

987 Ibid., *Encyclopedia*, p. 160.

988 Yao Jun, pp. 662 and 667.

989 Ibid.

990 1994 *Directory*, p. 47.

991 Yao Jun, 664.

992 Allen, 1991, Section 11; and Yao Jun, p. 664.

zhihuisuo/Xizhi) in August 1985.⁹⁹³ The name was changed to the Xian Base (*Xian jidi/Xiji*) sometime after 1993.⁹⁹⁴

12th Air Corps, Shantou and Xingning Command Post: In November 1959, the Shantou CP (*Shantou zhihuisuo/Shanzhi*) was established in Chenghai, Guangdong Province, but moved to Xingning, Guangdong Province, in 1960.⁹⁹⁵ At some point after 1960, another Shantou CP was established that became the 7th Air Corps in June 1962. In June 1969, the Xingning CP changed its name to the 12th Air Corps (*kong 12 jun*).⁹⁹⁶ The 12th Air Corps was abolished in April 1976.⁹⁹⁷

13th Air Corps: The 13th Air Corps (*kong 13 jun*) was created in Shijiazhuang, Hebei Province, in August 1970 and was abolished in March 1976.⁹⁹⁸

Kunming MRAF Command Post and Base: On 1 August 1960, the Kunming MRAF CP (*Kunming junqu kongjun zhihuisuo/Kunzhi*) was formed.⁹⁹⁹ In April 1976, the 5th Air Corps command staff was moved to Kunming and the Kunming MRAF CP was renamed the 5th Air Corps.¹⁰⁰⁰ In November 1978, the 5th Air Corps was renamed the Kunming MRAF CP.¹⁰⁰¹ The Command Post was renamed the Kunming Base (*Kunming jidi/Kunji*) sometime after 1993.¹⁰⁰²

Lhasa Command Post and Base: The Lhasa CP (*Lhasa zhihuisuo/Lazhi*) was established at the division-level in November 1962 and subordinated to the Chengdu MRAF in January 1969.¹⁰⁰³ In August 1985, it was downgraded to a general office (*bangongshi*), but was upgraded again in 1987 to a division-level command post.¹⁰⁰⁴ Lhasa is the PLAAF's smallest command post and, according to PLAAF officials in

⁹⁹³ Ibid., p. 664.

⁹⁹⁴ 1994 *Directory*, p. 47.

⁹⁹⁵ Yao Jun, p. 660. The command post was upgraded to a corps-level organization in April 1965 as the United States' involvement in Vietnam increased. The command post commander was Lin Hu, who was former PLAAF commander Wang Hai's regiment commander during the Korean War. He was a division commander during the 1958 Taiwan Straits crisis, a deputy commander in the Guangzhou MRAF under Wang Hai, and a deputy commandant of the PLAAF Command Academy. He became a PLAAF deputy commander under Wang Hai in September 1985.

⁹⁹⁶ Ibid., p. 664.

⁹⁹⁷ Ibid., p. 666.

⁹⁹⁸ Ibid., p. 664, 666.

⁹⁹⁹ Ibid., p. 660.

¹⁰⁰⁰ Ibid., p. 666; *Encyclopedia*, p. 160.

¹⁰⁰¹ Yao Jun, p. 667; *Encyclopedia*, p. 160.

¹⁰⁰² *Directory 1996*, p. 41.

¹⁰⁰³ Yao Jun, p. 661.

¹⁰⁰⁴ Ibid.

1989, is equivalent to only a brigade-level organization.¹⁰⁰⁵ According to PLA officials, the Lhasa CP probably did not get restructured as a base (*jidi*) when the other command posts changed in 1993. The 1999 *Directory of PRC Military Personalities* still carried Lhasa as a command post.¹⁰⁰⁶

Hetian Command Post: In July 1962, the Lanzhou MRAF created the Hetian Command Post (*Hetian zhihuisuo/Hezhi*) in Xinjiang.¹⁰⁰⁷ The Hetian CP was a division-level organization. The CP was downgraded to a maintenance field station (*changzhan*) in April 1967.

Zhangzhou Command Post: In October 1978, the Fuzhou MRAF re-established the Zhangzhou Command Post (*Zhangzhou zhihuisuo/Zhangzhi*) in Fujian Province.¹⁰⁰⁸ This command post was probably originally established in 1958, but was later abolished.

Table 9.6 PLAAF Air Corps Status

Air Corps	Date Established	Location when established	Current Status
1 st	Nov 1951	Changchun, Jilin	Active in Changchun
2 nd	Nov 1951	Andong, Liaoning	Abolished
3 rd	Nov 1951	Dalian, Liaoning	Dalian Base
4 th	Aug 1952	Shanghai	Shanghai Base
5 th	Aug 1952	Weifang, Shandong	Abolished
6 th	Mar 1956	Yangcun, Hebei	Tangshan Base

¹⁰⁰⁵ *Zhongguo Kongjun*, pp. 22-23. The author escorted two USAF delegations to Lhasa in 1988.

¹⁰⁰⁶ *Directory of PRC Military Personalities*, October 1999, p. 46.

¹⁰⁰⁷ *Zhongguo Kongjun*, pp. 22-23.

7 th	Jun 1962	Shantou, Guangdong	Active in Nanning
8 th	Jun 1962	Jinjiang, Fujian	Active in Fuzhou
9 th	Nov 1964	Wulumuqi, Xinjiang	Active in Wulumuqi
10 th	Jun 1969	Datong, Shanxi	Active in Datong
11 th	Jun 1969	Hetian, Xinjiang	Xian Base
12 th	Jun 1969	Xingning, Guangdong	Abolished
13 th	Aug 1970	Shijiazhuang, Hebei	Abolished

Table 9.7 Origin of PLAAF Air Divisions

Division	Regiments	Date	Aircraft	Location when established
1 st	1 st 2 nd 3 rd	Mar 56	Fighter	Anshan, Liaoning
2 nd	4 th 6 th	Nov 50	Fighter	Shanghai Longhua
3 rd	7 th 8 th 9 th	Oct 50	Fighter	Shenyang, Liaoning. Currently in Wuhu, Anhui
4 th	10 th 12 th	Oct 50	Fighter	Liaoyang, Liaoning Changed to 1 st Division. Then reestablished in Mar 56 in Liaoyang.
5 th	13 th 15 th	Dec 50	Ground Attack	Kaiyuan, Liaoning
6 th	16 th 17 th	Nov 50	Fighter	Anshan, Liaoning
7 th	19 th 21 st	Dec 50	Fighter	Dongfeng, Jilin2

8 th	22 nd 24 th	Dec 50	Bomber	Siping, Jilin
9 th	25 th 27 th	Dec 50	Fighter	Jilin, Jilin Transferred to Naval Aviation as 5 th Division, Sep 55. Reestablished in Ganzhou in Mar 56.
10 th	28 th 30 th	Jan 51	Bomber	Nanjing, Jiangsu
11 th	31 st 33 rd	Feb 51	Ground Attack	Xuzhou, Jiangsu
12 th	34 th 36 th	Dec 50	Fighter	Xiaoshan, Zhejiang
13 th	37 th 39 th	Apr 51	Transport Recce	Xinjin Xian, Sichuan
14 th	40 th 42 nd	Feb 51	Fighter	Beijing Nanyuan
15 th	43 rd 45 th	May 51	Fighter	Huaide Xian, Jilin
16 th	46 th 48 th	Feb 51	Fighter	Qingdao, Shandong
17 th	49 th 50 th 51 st	Apr 51	Fighter	Tangshan, Hebei Transferred to Naval Aviation as 4 th Division, May 54. Reestablished in Beijing in Mar 56.
18 th	52 nd 54 th	May 51	Fighter	Guangzhou, Guangdong
19 th		Nov 51	Fighter	
20 th		Nov 51	Bomber	
21 st		Nov 51	Fighter	
22 nd		Nov 51	Ground Attack	
23 rd		Nov 51	Bomber	

24 th	70 th Dadui	Nov 51	Fighter	Zunhua, Hebei
25 th		Nov 51	Bomber	
26 th	76 th 78 th Dadui	Dec 52	Fighter	Liuzhou, Guangxi
27 th		Dec 52	Fighter	Tongxian, Hebei
28 th		Dec 52	Ground Attack	Gucheng, Today - Hangzhou, Zhejiang
29 th		Jan 54	Fighter	Jiaxing, Zhejiang
30 th		May 60		Donggou, Liaoning
31 st		May 60		Yancheng, Jiangsu
32 nd		May 60		Jinghai, Hebei
33 rd		May 60		Shanpo, Hubei
34 th		Sep 63	Transport	Beijing, Hebei. Sep 80 changed to Indep transport rgmt. Mar 88 changed back to 34 th Division that is directly subordinate to HqAF
35 th		Mar 65		
36 th		Mar 65	B-6	Wugong, Shaanxi
37 th		Aug 66		Dandong Langtou, Liaoning
38 th		Jun 67		Jinghai, Hebei Formerly 1 st Training Base
39 th		Jun 67		Liuhe, Jilin Formerly 2 nd Training Base
40 th -46 th		Jul 69		

47 th		Feb 70		Yinchuan, Ningxia
48 th -50 th		Apr 71		

Table 9.8 Origin of PLAAF Independent Regiments

Independent Regiment	Date	Aircraft	Location when established
1 st Indep Recce Regiment	Nov 51	Recce	Nanjing
2 nd Indep Recce Regiment	Nov 51	Recce	Nanjing
3 rd Indep Transport Regiment	Dec 52	Transport	
4 th Indep bomber Regiment	Dec 52	Bomber	
5 th Indep Recce Regiment	Jan 54	Recce	Yuanshi, Hebei

APPENDIX H. PLAAF RESEARCH INSTITUTES

All of the PLAAF's research institutes are subordinate to HqAF's Logistics Department or Equipment Department.¹⁰⁰⁹ In turn, all of the research institutes within the Logistics Department are subordinate to the Headquarters Department and those in Equipment Departments to the Headquarters Department and Scientific Research Department. Each of these three departments have a Division (*chu*) which is specifically responsible for planning, budgeting, and issuing requirements/projects to each of their research institutes.

There are eight numbered research institutes under the Scientific Research Department. Each of these research institutes have about 200 personnel. The senior administrative personnel are active duty military, and the technicians are Air Force civil service personnel. While this department has functional (*yewu*) control for the planning, budgeting, and requirements for these institutes, other departments have administrative (*xingzheng*) responsibilities for them.

In general terms, the Scientific Research Department is responsible for development of new systems, and the other departments are responsible for the systems once they are deployed. However, the Scientific Research Department, the research institute, and the associated department work closely on all phases of weapons and equipment development. Except for the First and Fourth Research Institutes, all of the research institutes assigned to the Scientific Research Department are associated with departments in the first-level Headquarters Department, which also has several research laboratories.

The **First (Aeronautical Engineering/hangkong gongcheng) Research Institute**, AKA the Maintenance/*weihu* Research Institute, was established at Beijing Nanyuan airfield in August 1958, changed its name to the PLA Sixth Research Institute in June 1961, and was reactivated as the PLAAF First Research Institute in September 1962. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Equipment Department's Field Maintenance Department.

The **Second (Radar/leida) Research Institute** was established in Beijing in August 1958. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Radar Department. It is co-located with the Third, Fifth, and Seventh Research Institutes at Qinghe, in northern Beijing. There is an Air Force radar repair factory in Lintong, near Xian, which probably works closely with this research institute.

The **Third (Communications/tongxin) Research Institute** was established in Qinghe in August 1958. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Communications Department.

¹⁰⁰⁹ Unless specified, the information in this appendix was taken from Allen, 1991. See also *Kongjun da cidian*; Yao Jun; and Xin Ming.

In March 1960, the **Fourth (Aviation Medicine/hangkong yixue yanjiusuo/hangyi yanjiusuo) Research Institute** was established in Beijing. It is co-located with the Air Force General Hospital. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Logistics Department's Health Department.

The **Fifth (Air Defense/daodan) Research Institute** was established in Qinghe in June 1976. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Antiaircraft Artillery Department. It also works closely with the Logistics Department's Armament Department's SAM Division. It is responsible for SAMs and probably AAA. It is not responsible for air-to-air missiles. It is co-located with the Second, Third, and Seventh Research Institutes.

The **Sixth (Technical Reconnaissance/jishu zhencha, Telecommunications Technology/dianxin jishu, Intelligence/qingbao) Research Institute** was established in Beijing in June 1976. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the intelligence department. The primary missions of the Sixth Institute are development of telecommunications equipment for intelligence collection, and ground and aerial reconnaissance. Ground reconnaissance includes signals intelligence against the Soviet Union from listening posts along the border, and there is a Division (*chu*) within the institute which is specifically responsible for this mission. Aerial reconnaissance includes photographic and other means.

The **Seventh (Aviation Weather/hangkong qixiang) Research Institute** was established in Qinghe in June 1976. It is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Weather Bureau. It is co-located with the Second, Third, and Fifth Research Institutes.

The **Eighth (Weapons System and Evaluation/wuqi xitong lunzhengsuo) Research Institute** belongs solely to the Scientific Research Department. This institute evaluates ongoing/completed research to see if it is actually feasible to proceed with a particular system. If the Eighth approves the theoretical concepts, then it issues the necessary requirements to continue research or to produce the specific system or piece of equipment. This institute has several subordinate laboratories and is also responsible for air-to-air missile development. It was previously co-located with the other research institutes above in Qinghe, but moved in 1989 to a new facility at Beijing Nanyuan airfield.

The Simulator Research Lab (*moni qi yanjiushi*) is functionally subordinate to the Scientific Research Department, but is administratively subordinate to the Training Department. Its location is not known.

The Logistics Department's Headquarters Department is responsible for the functional control, including the budget, plans, and regulations, for all of the research institutes that belong to the Logistics Department. In the 1950s and 1960s, the Logistics Department established the Medical and Fuels Research Institutes. After the Third Plenum of the 11th Party Congress, research institutes, such as those for Capital Construction, Aviation Munitions, and SAMs etc., were established.

The Fuels (*youliao*) Research Institute was established as the Aviation Fuel Research Institute (*hangkong youliao yanjiusuo*) in Beijing in 1960. It is functionally

subordinate to the Logistics Department's Headquarters Department, but is administratively subordinate to the Fuels Department.

The Clothing (*beizhuang*) Research Institute is functionally subordinate to the Logistics Department's Headquarters Department but is administratively subordinate to the Quartermaster Department. It is located in Beijing.

The Aviation Munitions (*hangkong danyao*) Research Institute is functionally subordinate to the Logistics Department's Headquarters Department, and is administratively subordinate to the Armament Department. It is located in Chuzhou City, Anhui Province.

The Four Stations Equipment (*sizhan zhuangbei*) Research Institute develops oxygen generation, compressed air, battery charging, and power supply equipment. Its location is unknown. There are PLAAF four stations repair facilities (*sizhan xiuli chang*) in Shenyang and Chuzhou.

The Medicine Examination/Inspection (*yaopin jianyan*) Research Institute is functionally subordinate to the Logistics Department's Headquarters Department, but is probably administratively subordinate to the Health Department. It is located at Beijing Nanyuan airfield.

The Capital Construction (*jijian gongcheng*) Research Institute is functionally subordinate to the Logistics Department, is probably administratively subordinate to the Airfield Construction and/or Airfield and Barracks Construction Departments. Its location is unknown.

The Aviation Repair (*hangkong xiuli*) Research Institute was established in Nanjing in February 1978. It is functionally subordinate to the Equipment Department's Headquarters Department, but is administratively subordinate to the Factory Management Department. It is co-located with the Aviation Electro-Mechanical Research Institute (*hangkong jidian yanjiusuo*) in Nanjing.

In addition to the research institutes noted above, the PLAAF formed the research institutes listed below from 1957-1965. Their status is not known.

- Aviation Equipment Technical & Maintenance Research Institute (*hangkong zhuangbei jishu weixiu yanjiusuo*)
- Navigation Research Institute (*daohang yanjiusuo*)
- Automation Research Institute (*zidonghua yanjiusuo*)
- Refueling Equipment Research Institute (*jiayou shebei yanjiusuo*)
- Chemical Defense Research Institute (*fanghua yanjiusuo*)
- Weapons Equipment System (*wuqi zhuangbei xitong*) Research Institute

There are also various PLAAF research centers, such as those listed below:

- In 1981, the PLAAF Navigation Theory Research Center (*kongjun linghang lilun yanjiu zhongxin*) was established.
- The PLAAF's SAM and AAA Applied Research Center (*kongjun dikong daodan, gaopao yingyong yanjiu zhongxin*) is located at an unknown location.

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10. THE ORGANIZATION OF THE PEOPLE'S LIBERATION ARMY NAVY (PLAN)

By Bernard D. Cole^{1010 1011}

INTRODUCTION

This addresses China's naval establishment, focusing on the People's Liberation Army Navy (PLAN). Understanding the organization of a nation's military service may tell us much about that nation's security priorities, international aspirations, and domestic priorities. Naval organization may be particularly telling in this respect, since navies are so technology- and equipment-dependent that they demand very large investments of national attention and treasure. The organization of a navy should also reflect the strategic imperatives and doctrinal thinking of the nation. Fleet composition, homeport location, and command arrangements all provide indicators of the role the nation's leaders intend for their navy and national security priorities.

Speaking to the first session of the National Political Consultative Conference in July 1949, Mao Zedong proclaimed:

Our national defense will be strengthened and we won't permit any imperialist to encroach any more upon our territory. Based on the gallant and tested People's Liberation Army, the people's armed forces of ours must be maintained and developed. We shall not only have a powerful army, but also a powerful air force and a powerful navy.¹⁰¹²

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¹⁰¹¹ This paper reflects the views of the author and may not reflect those of the National War College or any other agency of the U.S. Government

Mao and the leading PLA generals were, not surprisingly, strict continentalist in strategic outlook, and it was only the events of the next few years that convinced them China required a navy capable of more than guarding the army's flanks and helping it cross rivers. The need to enforce order on China's coastal waters, offshore battles with the remaining Kuomintang (KMT) navy, including operations to evict KMT troops from various islands, and campaign planning to invade Taiwan were some of these events.

IMPERIAL CHINA

The PLAN can trace its lineage back through the dynasties. The earliest recorded naval battle in China occurred during the Spring and Autumn Period, in 549 B.C., when rival rulers used ships to attack each other's forces; large-scale naval operations continued to play a role in Chinese warfare through the Han Dynasty (206 B.C.-220 A.D.).¹⁰¹³

Chinese sea-goers were the first to control their ships with sails and rudders, greatly increased their vessels' seaworthiness through compartmentation, painted their vessel bottoms to inhibit wood rot, and built dry docks. They developed the art of navigation to a high degree, including use of the portable compass as early as 1044.¹⁰¹⁴ The sea also probably provided the earliest trading routes with south and west Asia, with regular commercial routes established by the end of the Tang Dynasty (907).¹⁰¹⁵

Song Dynasty

The high point of naval developments in dynastic China probably occurred during the Song Dynasty (960-1279), over a 500-year period when China deployed the world's most powerful and technologically advanced navy.¹⁰¹⁶ During this time, combat fleets

¹⁰¹² Quoted in Bruce Swanson, *The Eighth Voyage of the Dragon: A History of China's Quest for Seapower*, Annapolis, MD: U.S. Naval Institute Press, 1982, p. 183.

¹⁰¹³ Gang Deng, *Chinese Maritime Activities and Socioeconomic Development, c. 2100 B.C.-1900 A.D.*, Westport, CT: Greenwood Press, 1997, is a well-written history of this topic. All dates are "A.D.," unless otherwise noted.

¹⁰¹⁴ Joseph Needham's massive work, *Science and Civilization in China*, vols. 1-6, Cambridge: Cambridge Univ. Press, 1954-1986, discusses these and related developments.

¹⁰¹⁵ Deng, p. 41. Also see "China's Sea Route to West Asia Begins in Xuwen," *Xinhua*, 21 June 2000, in FBIS-CPP20000621000077, for archeologists' theory that trading voyages may have departed from Guangdong Province as early as 200 BC, 200 years before the "Silk Road" was established.

¹⁰¹⁶ See Paul C. Forage, "The Foundations of Chinese Naval Supremacy in the Twelfth Century," in Jack Sweetman, ed., *New Interpretations in Naval History: Selected*

composed of several hundred warships and supply vessels were common, with the Song navy reportedly totaling 13,500 ships in 1274.¹⁰¹⁷ Chinese maritime technology also matured during this age, and the maritime sector was an important part of the national economy. Perhaps most significantly, the Song regime was the first in China to establish a permanent national navy as an independent service, administered by a central government agency. The "Imperial Commissioner's Office for the Control and Organization of the Coastal Areas" was established in 1132 to supervise a navy of 52,000 men.¹⁰¹⁸

The Song maritime experience was based on a rapidly expanding national economy, with a particularly strong maritime sector encompassing commerce, fisheries, and transportation. As the navy was expanded and modernized, so were port facilities, supply centers, and dockyards; soldiers were trained specifically as marines and coast guard squadrons established.¹⁰¹⁹ Song navies used both sail and paddle wheel-driven craft, the latter powered by laborers on treadmills; doctrine was formalized, with formation maneuvering, long-range projectile launches, and complex tactics.¹⁰²⁰

China remained a sea power during the two succeeding dynasties. In fact, the overthrow of the Song regime by the Yuan (Mongol) Dynasty resulted in significant part because the latter rapidly mastered naval warfare. The Yuan also used large fleets to undertake invasions of Vietnam, Java, and Japan: the 1274 expedition against Japan included 900 ships and 250,000 soldiers; that of 1281 sent 4,400 ships.¹⁰²¹

Ming Dynasty

The Ming Dynasty (1368-1644) saw China reach the pinnacle of its overseas naval deployments, but also witnessed the collapse of imperial naval power. Zheng He's early fifteenth century voyages to the Middle East and Africa represented a standard of Chinese shipbuilding, voyage management, navigation ability, and naval organization

papers from the Tenth Naval History Symposium Held at the United States Naval Academy, 11-13 September 1991, Annapolis, MD: Naval Institute Press, 1992, p. 3.

¹⁰¹⁷ Ibid., p. 70.

¹⁰¹⁸ Lo Jung-pang, "The Emergence of China as a Sea Power During the Late Sung and Early Yuan Periods," *The Far Eastern Quarterly*, vol. XIV, August 1955, p. 491. By comparison, according to N.A.M. Rodger, *The Safeguard of the Sea: a Naval History of Britain, 660-1649*, N.Y.: W.W. Norton, 1997, p. 221ff, a likely date for the initial organization of a central office for administering England's Royal Navy is 1545.

¹⁰¹⁹ Forage, pp. 6-7.

¹⁰²⁰ Ibid., pp. 19-21, provides a fascinating account of two battles between Song and Yuan naval forces.

¹⁰²¹ John K. Fairbank, ed., "Maritime and Continental in China's History," in *The Cambridge History of China, vol. 12: Republican China: 1912-1949*, Cambridge: Cambridge Univ. Press, 1983, vol. 1, p. 15.

afloat and ashore well beyond European capabilities. Zheng He led large fleets of ships, some displacing over 400 tons, on four voyages half-way around the world at a time when Portuguese explorers were still feeling their way down the west coast of Africa in 50-ton caravels.¹⁰²² At its height, the Ming fleet included as many as 3,500 ships; most were warships, but transports, troop carriers, and even replenishment-at-sea ships were built and organized into discrete squadrons to facilitate administration and operations.¹⁰²³

The Ming rulers deliberately ended these voyages for domestic financial and political reasons, just at the time when European nations were beginning to use the high seas to achieve economic wealth and to proselytize. Furthermore, the government allowed its naval forces to atrophy; organization and administration of the navy became largely a "paperwork drill," and even coastal piracy made a comeback.¹⁰²⁴ By 1500, the government had made it illegal "to build boats of more than two masts," and in 1525 an imperial edict authorized coastal authorities to destroy all oceangoing ships."¹⁰²⁵

Even during this long period of brilliant maritime scientific progress and dominating power, however, the focus of China's national security concerns still lay to

¹⁰²² Louise Levathes, *When China Ruled the Seas: The Treasure Fleet of the Dragon Throne, 1405-1433*, N.Y.: Oxford Univ. Press, 1994, provides a comprehensive description of these epic voyages.

¹⁰²³ *Ibid.*, p. 175.

¹⁰²⁴ There were several reasons for the downfall of the Ming navy. First, the opening of China's Grand Canal in 1415 reduced the need for coastal trade; second, the sea-going commerce attracted foreign merchants and sailors, which increased the foreign presence in coastal provinces: the central government feared that this would loosen its control over these provinces. Third, court politics, with struggles between civil officials and the court eunuchs—traditional sponsors of overseas trade—became increasingly bitter; civil officials tried to weaken the eunuchs by curtailing this trade, which provided them with most of their funding. Fourth, the navy was allowed to deteriorate; by the end of the 16th century, the Ming government was unable to defend Chinese maritime traders against pirates. Fifth, the threat from Mongols and other Asian aggressors increased, which both increasingly focused government concerns inland, and absorbed an increasing portion of the national budget. Finally, the Ming decision also reflected Chinese xenophobia, perhaps best expressed in the Qing Emperor Ch'ien-lung's response to Britain's 1793 attempt to establish relations with Beijing when he told Lord MacCartney that "we possess all things. I set no value on objects strange or ingenious, and have no use for your country's manufactures."

For an interesting but Eurocentric interpretation of the role maritime mobility played in European imperialism, see George Raudzens, "Military Revolution or Maritime Evolution? Military Superiorities or Transportation Advantages as Main Causes of European Colonial Conquests to 1788," *The Journal of Military History*, Vol. 63, July 1999, pp. 631-642.

¹⁰²⁵ Levathes, p. 174.

the north and west.¹⁰²⁶ No dynasty fell because of maritime invasion or pressure: usurpers emerged from the Asian interior and the crucial battles were land battles. Naval missions were defense of the coast, defense and control of maritime trade, and control of riverine and canal traffic to safeguard the state's economic interests. The navy was during various periods well-organized, capable, and even powerful, but never was it vital to the dynasty's survival.

The Qing Navy

The Qing (Manchu) Dynasty made no concerted effort following its 1644 assumption of power to rebuild the navy or expand the maritime sector of China's economy. The Qing faced no significant threat from the sea during its first century and a half in power, and there seemed insufficient justification for the large investment needed for a large, modern navy.¹⁰²⁷ This was especially true after the most notable Qing maritime campaign, when the new dynasty conquered Taiwan in 1683. The island was described as "still largely unknown: flat, malarial plains along the west, backed by inhospitable mountain ranges....[An] unfriendly aboriginal population further discouraged exploration or settlement. . . ."¹⁰²⁸

Until the late 19th century, the Qing navy remained powerful enough to prevent coastal piracy from getting out of hand, to keep order on the canals and rivers, and to perform other coast guard-type functions. China had fallen so far behind the global norm in naval power, however, that it was completely unable to defeat the late-eighteenth and early-nineteenth century imperialists—who came almost entirely by sea.

Major "restoration" movements occurred in China late in the Qing period, following the end of the Taiping Rebellion in 1864. "Self-strengthening" reformers used the rubric of "Chinese learning as the fundamental structure, Western learning for practical use" to describe their intent to take advantage of western science and technology to develop modern Chinese capabilities.

By 1884, China had organized and deployed a modern navy, led by the efforts of Li Hongzhang, one of the most prominent of the scholar-bureaucrats who appreciated how far behind foreign powers China had fallen. Li used three approaches to build China's first modern navy: indigenous production, purchases abroad, and the reverse engineering of foreign systems. An arsenal was established in Shanghai to build steam-powered gunboats, but such efforts to modernize China's navy were opposed by Confucian traditionalists who were the rigid ideologues of the day: it was in part a struggle between ideology and professionalism that foreshadowed the similar situation today.

¹⁰²⁶ "The northern frontier became the fixation," according to Fairbank, p. 16.

¹⁰²⁷ Ibid., p. 13, makes this point.

¹⁰²⁸ Jonathan D. Spence, *The Search for Modern China*, N.Y.: W.W. Norton, 1990, pp. 53-54, describing Taiwan in terms which might be still used.

The new navy also suffered from high-level governmental corruption and weak organization. It was formed into four fleets that were essentially independent navies.¹⁰²⁹ The first test of the new Qing navy resulted from disputes with France over its colonization of Vietnam. Hostilities broke out in August 1884 and the local French fleet attacked the outgunned Chinese Fujian Fleet in Fuzhou Harbor, sinking every ship.¹⁰³⁰ China's other fleets were not sent to fight the French; Li held only problematic authority over the other fleets and in any case wanted to conserve and continue to build up remaining naval strength. His efforts were successful on paper, including establishment of a national Navy Office, a more organized training regimen and shore establishment, and in 1888 standardized naval regulations.¹⁰³¹

Despite these achievements, China's fleets failed to become a coherent national navy, and the most powerful fleet, the Beiyang, came to grief trying to halt Japanese incursions into Korea in the 1890s. The Beiyang Fleet of two modern battleships, ten cruisers, and two torpedo boats lost a sea battle to the Japanese in September 1894. The fleet then withdrew to Weihaiwei's strongly fortified harbor on the northern Shandong coast. In January 1895, the Japanese landed troops who seized the Chinese forts guarding Weihaiwei.¹⁰³² Their guns were then turned on the Chinese ships, which were also attacked by Japanese torpedo boats. The Chinese lost five ships; in conjunction with the September 1894 losses and the suicides of the fleet commander and other senior officers, the Peiyang Fleet was eviscerated.¹⁰³³ The other Chinese fleets again did not join the fight.

China and Japan launched near-simultaneous efforts to organize a modern navy in the second half of the nineteenth century. Both nations sought the technological and organizational expertise of outsiders; they bought and reverse-engineered foreign ships

¹⁰²⁹ Fairbank, *China: A New History*, Cambridge: The Belknap Press of Harvard Univ. Press, 1992, p. 220, relates the most famous case of corruption: the diversion of perhaps \$50 million in naval construction funds to the building of the Empress's Summer Palace in Beijing, complete with a large boat made of marble.

The new Chinese navy was organized into four fleets. The Peiyang Fleet, organized by a leader of the self-strengthening movement, Li Hongzhang, was the most modern and powerful and by 1884 included two 7,500-ton displacement, German-built battleships. The Fujian Fleet was homeported in Fuzhou; the other two fleets were the Nanyang and Guangdong.

¹⁰³⁰ Spence, p. 221. The French had eight warships and two torpedo boats; the Chinese had eleven warships and several other craft, but all were made of wood. The French also destroyed the Chinese shore installations.

¹⁰³¹ Swanson, p. 96ff, discusses these developments.

¹⁰³² Japanese success was simplified by the fact that the forts' guns were designed only to defend against threats from seaward; Japanese forces took advantage of the same flaw in 1941, when it was repeated by the British in Singapore.

¹⁰³³ *Ibid.*, p. 223.

and systems while developing an indigenous military-industrial infrastructure. Japan succeeded, because it also developed a coherent organization that enabled the navy to function effectively as an instrument of the national security structure.

China's naval conflicts with the French and the Japanese demonstrated that while Beijing had successfully acquired the ships and weapons of a modern navy, it had not instituted effective central administration, training, logistical and maintenance support, and command and control. Furthermore, operational doctrine was almost completely lacking; the navy's leaders failed to establish inter-fleet coordination, exercises, or mutual support. Finally, China failed to provide its new navy with a coherent strategy tied to national security objectives. As a result of these factors, China's attempt to deploy a modern navy in the late nineteenth century ran aground.¹⁰³⁴

Republican China (1911-1948)

Chinese naval forces during the republican period relied almost entirely on ships leftover from the Qing or obtained from foreign nations. No significant efforts were made to rebuild the navy, or perhaps could have been made, given the general political and economic disarray suffered by China during those decades. Individual warlords occasionally made effective use of maritime forces, but these were viewed as adjuncts of the army. The low point was probably reached during the height of the warlord period, in the mid- to late-1920s. A western observer dismissed the Chinese navy since

“there has been a steady deterioration in the discipline of the Chinese Navy since the establishment of the Republic, and it has now ceased to exist as a national force, the different units being under the control of various militarists, who treat the vessels as their own private property It is impossible today to obtain a complete list of Chinese warships, showing to which party or militarist faction they belong.

¹⁰³⁴ China was only one of several countries building navies at this time: Great Britain, Germany, France, Italy, Russia, Japan, the United States, even Austria-Hungary, were all modernizing their fleets. Those that failed spectacularly—China, Germany, Austria-Hungary—all failed to develop meaningful strategic and operational frameworks for their new navies.

William Ferdinand Tyler, *Pulling Strings in China*, London: Constable & Co., 1929, tells some colorful stories about another, more successful maritime force developed in China during the late nineteenth century: the Revenue Service established as part of the Customs Service long-supervised by Sir Robert Hart. The ships of this service were operated mostly by British officers. Tyler also states that he was onboard the Chinese flagship at Weihaiwei in 1895, and characterizes the navy as “a monstrously disordered epicyclic heterogeneity.”

Vessels have been changing their allegiance . . . with bewildering frequency.”¹⁰³⁵

Threats to the new regime were *ground* threats from the Chinese Communist Party (CCP), Russia, and internal warlords. Naval actions that occurred took place chiefly on the rivers, especially the Yangzi and the waterways of the Canton Delta. Many of the warlords who struggled to gain control of various provinces and districts during the revolutionary period used China's inland waterways for transportation, as sources of revenue--taxing the dense river and canal traffic, or as military barriers. These efforts led to frequent "firefights" between provincial forces and the imperialist gunboats that patrolled China's rivers and lakes during the period, but did not contribute to any national effort to revive Chinese maritime power.¹⁰³⁶

Foreign sea power was especially effective as a "force multiplier": Great Britain, the United States, and Japan were able to use sea and river transport to move troops rapidly between crisis areas.¹⁰³⁷ This allowed them to influence the course of events in revolutionary China with relatively small military formations. There was also an October 1929 naval and land engagement on the Heilong (Amur) River between Chinese and Soviet forces that presaged the 1969 incident over disputed boundaries.¹⁰³⁸ Japan introduced a new element of maritime warfare in 1932, when it used bombers from an aircraft carrier stationed offshore Shanghai to bombard Chinese forces threatening Japanese interests in the city. Republican China was unable to contest such maritime efforts.

Jane's Fighting Ships documented this sad story. The 1939 edition reported that "Pending the termination of hostilities between China and Japan it has proved impossible

¹⁰³⁵ "The Chinese Navy," in *Shanghai Defense Force and Volunteers*, Shanghai: North China Daily Herald, 1929 (?), p. 1302.

¹⁰³⁶ One notable exception was a battle at the upper Yangzi River port city of Wanhsien, in September 1926. The local warlord, General Yang Sen, first commandeered British-owned steamers to transport his troops; when a British gunboat, HMS *Cockchafer*, attempted to free the steamers it ran into an ambush very capably managed by Yang and suffered severe casualties. See B.D. Cole, *Gunboats and Marines*, Newark, DE: University of Delaware Press, 1983, pp. 89-90, for an account of this affair.

¹⁰³⁷ The United States, for instance, used just two navy transports and a commercial passenger liner to move a single regiment of Marines from the United States to the Far East, and then between the Philippines and China, and between north and south China, as crises waxed and waned.

¹⁰³⁸ Swanson, p. 157. The "Chinese" naval forces were actually those of Zhang Xueliang, the Manchurian warlord (the "Young Marshall") who had recently sworn allegiance to Chang K'ai-shek's Nationalist government. The Chinese account of this battle quoted by Swanson ends with a Soviet victory due to superior firepower, including air strikes.

to obtain a reliable list of the ships of the Chinese Navy that remain in service. But it is believed that the following [forty-one surface ships] have been destroyed or otherwise lost." In 1945 *Jane's* listed fourteen ships in the Chinese Navy, but listed another six as belonging to the "Nanking Quisling Government."

China's record as a naval power during the long period of empire and republic documents an understandable focus on the continental rather than the maritime arena. Navies were built, organized, and employed only episodically and almost entirely for defensive purposes.

A NEW BEGINNING: THE PEOPLE'S REPUBLIC OF CHINA (PRC)

The Early Years: 1949-1954

The communist victory in 1949 was an army victory. The PLA had no naval arm and was unable to project power across even the narrow Taiwan Strait. Furthermore, many Chinese thought that China's 19th and 20th century humiliation had been due in large part to foreigners' ability to invade from the sea. The new government in Beijing sought to defend its coastline and island territories against both the United States and the KMT regime on Taiwan.

The "East China People's Navy" was organized on 1 May 1949, formed mostly by the defection of the former KMT Second Coastal Defense Fleet.¹⁰³⁹ The new navy became part of the "East China Military Command," organized in January 1950 with strength of more than 450,000 men and headquartered in Shanghai.

The new maritime force was given several missions. First was establishing law and order on coastal and riverine waters; second was helping the army capture offshore islands still occupied by the KMT and to prepare for the capture of Taiwan. Third, the CCP Politburo charged the new navy with "defending both [eastern and southeastern] China coasts and the Yangzi River."¹⁰⁴⁰ Commander (and political commissar) of the East China Navy, General Zhang Aiping, interpreted these missions as requiring the new navy

¹⁰³⁹ Larry M. Wortzel, "The Beiping-Tianjin Campaign of 1948-49: The Strategic and Operational Thinking of the People's Liberation Army," Paper prepared for the U.S. Army War College's Strategic Studies Institute, Carlisle, PA, n.d., Chart 1, points out that by July 1949 the PLA actually included seventy-seven "naval vessels"; Gene Z. Hanrahan, "Report on Red China's New Navy," Naval Institute *Proceedings*, vol. 79, August 1953, p. 847, describes the Nationalist contribution to this force as "twenty-five vessels ranging from LCTs to destroyers, representing an estimated one-fourth of the total Nationalist naval force. . . ."; and David G. Muller, Jr., *China as a Maritime Power*, Westview Press, 1983, p. 13, estimates that 2,000 former Republican naval personnel who defected to the communist regime in 1949 formed the core of the nascent PLAN.

¹⁰⁴⁰ Quoted in Shu, p. 51.

to safeguard China's independence, territorial integrity and sovereignty against imperialist aggression. . . . to destroy the sea blockade of liberated China, to support the land and air forces of the People's Liberation Army in defense of Chinese soil and to wipe out all remnants of the reactionary forces.¹⁰⁴¹

Among Zhang's first acts was establishing the "Naval Academy for the East China Military Zone" at Nanjing, in August 1949, to train army troops to become sailors in the new navy.¹⁰⁴² He also organized a rudimentary maintenance and logistical infrastructure.

The PLAN was officially established in May 1950, absorbing the East China Navy.¹⁰⁴³ Zhang remained in command; he was typical of early PLAN leadership, veterans of China's civil war who had spent their entire career as ground commanders. They were transferred to the new navy because of their political reliability and proven combat record, rather than naval experience. In fact, only two career naval officers have commanded the PLAN: Admirals Zhang Liangzhong, from 1987-1996 and Shi Yunsheng, from 1997 to the present.¹⁰⁴⁴

Zhang Aiping visited Moscow in September 1949, and the PLAN was established with Soviet assistance obtained by Mao Zedong during his 1949-50 stay in Moscow. China acquired mostly small vessels suitable to combat the coastal threat from Taiwan, as Zhang set out to develop a defensive force that would be inexpensive to build, and could be quickly manned and trained.¹⁰⁴⁵ Beijing's goal was the naval capability to recover the offshore islands still occupied by the KMT, to conclude with the invasion of Taiwan

¹⁰⁴¹ General Zhang Aiping, quoted in *ibid.*, p. 848.

¹⁰⁴² Muller, p. 14.

¹⁰⁴³ *Ibid.*, pp. 46-54, provides a useful description of the beginnings of the PLAN.

¹⁰⁴⁴ The reverse also occurs. Author's conversation with Qingdao Garrison DCOS for Militia and Reserve Affairs in May 2000 involved a long discussion with a PLA "senior- colonel," who had spent the previous twenty-two years as a senior captain in the PLAN; his transfer to the army came about because of his expertise as an engineer.

¹⁰⁴⁵ The new PLAN also ordered two new cruisers from Great Britain and attempted to obtain surplus foreign warships through Hong Kong, efforts that were nullified by the outbreak of the Korean War.

He Di, "The Last Campaign to Unify China': The CCP's Unmaterialized Plan to Liberate Taiwan, 1949-1950," *Chinese Historians*, vol. 5, Spring 1992, p. 8. This article is probably the most complete account of this period's PLAN activities connected with the Taiwan Strait islands. Its author works at the Institute of American Studies of the Chinese Academy of Social Sciences and presumably had good access to PLA archives while researching this article.

in August 1951. Mao Zedong considered the capture of Taiwan "an inseparable part of his great cause of unifying China."¹⁰⁴⁶ He lacked experience in naval warfare, but quickly learned that a successful campaign against Taiwan would require adequate amphibious training, naval transportation, "guaranteed air coverage," and the cooperation of a "fifth-column" on the island--requirements that still apply.¹⁰⁴⁷

1950s

The Korean War presented mixed military lessons to China. The amphibious landing at Inchon in September 1950 was a major turning point of the war, while allied command of the sea allowed free employment of aircraft carriers and battleships to bombard Chinese and North Korean forces. The UN forces also suffered a significant maritime defeat, when a planned amphibious assault on the east coast port of Wonsan in October 1950 had to be canceled because the North Koreans had mined the harbor.¹⁰⁴⁸ Overall, however, Korea was not a maritime conflict and the PLA's successes on the land and in the air contributed to a continued policy of relying on a coastal navy for China's defense.

PLAN operations continued to focus on KMT attacks against the mainland and on capturing offshore islands held by Taiwan. The decade was highlighted by two Taiwan Strait Crises, in 1954-55 and 1958. The 1954-55 incident included the PLA seizure of the Dachen Islands, evacuated by the KMT in the face of PLA air power and developing amphibious assault proficiency.¹⁰⁴⁹

The navy's air force, the People's Liberation Army Navy-Air Force (PLANAF), was organized in 1952. Its mission was support of anti-surface ship and anti-submarine

¹⁰⁴⁶ Ibid., p. 2, points out that the date for assaulting Taiwan was postponed by Mao several times, as PLA failures against various offshore islands emphasized the additional time required to prepare for a successful, large-scale amphibious assault.

¹⁰⁴⁷ Ibid., p. 4

¹⁰⁴⁸ The American amphibious assault on Wonsan in October 1950 was so delayed by 2,000-4,000 mines laid in the harbor and its approaches that the city was captured by Allied troops attacking overland before a landing could be made from the sea. Two U.S. minesweepers were sunk and Japanese "sweeps" had to be called in to complete the task. The presence of mines had been anticipated, but the North Korean failure to lay their mines correctly in Inchon led the U.S. commanders to dismiss the dangers of mine warfare.

¹⁰⁴⁹ Gordon H. Chang and He Di, "The Absence of War in the U.S.-China Confrontation Over Quemoy and Matsu in 1954-1955: Contingency, Luck, or Deterrence?" *The American Historical Review*, vol. 98, December 1993, p. 1514, misleadingly describes this action during which "10,000 PLA troops...overwhelmed 1,086 Kuomintang soldiers."

defensive operations;¹⁰⁵⁰ initial inventory was eighty aircraft, including MiG-15 jet fighters, Tu-16 jet bombers (a model still active), and propeller-driven Tu-2 bombers.

The North Sea Fleet included the majority of the PLAN's submarine force, perhaps because it was the fleet nearest the U.S. naval forces based in Japan.¹⁰⁵¹ The East Sea Fleet, headquartered in Ningbo, was the busiest and most important of the PLAN's three operating fleets during the 1950s. It faced the American-supported KMT forces, and the Taiwan Strait crises occurred in this fleet's area of responsibility (AOR). The South Sea Fleet, once Hainan was taken from KMT forces in 1950 and the Vietnamese-French war ended in 1954, faced a hostile SEATO alliance but a relatively quiet maritime situation. Within ten years of its founding, the PLAN had been organized, sent to sea, and proven itself as a coastal defense force.

1960s

The 1960s were marked by major foreign and domestic events that constrained development of a sea-going navy. Most important was the split with the Soviet Union, when Soviet advisors (and their plans) were withdrawn from China in 1960. The navy suffered with the rest of the PLA, as training and development projects were left in turmoil.

Other significant events in the early 1960s included war with India, the reemerging Vietnam conflict, turmoil in the new African states, and revolutionary movements throughout Southeast Asia. None of these international events directly involved the navy; they did not provide justification for reorganizing or expanding the PLAN, but instead served to limit naval modernization.

The massive Soviet ground force threat in the 1960s and the PLA's lack of mobility drove China's national security strategy to focus on very large army forces, supplemented by a coastal navy. Naval modernization focused almost solely on the development in the 1960s of nuclear-powered attack and ballistic missile submarines, to the detriment of the remainder of the PLAN.¹⁰⁵²

Addition of a nuclear arm to a coastal defense navy resulted from Mao's determination that China join the nuclear club. Despite the ideological turmoil of the late

¹⁰⁵⁰ Kenneth W. Allen, Glenn Krumel, and Jonathan D. Pollack, *China's Air Force Enters the 21st Century*, Santa Monica, CA: RAND, 1995, p. 205 n.11: little open-source information is available about PLANAF assets; a reasonable assumption is that the navy's air arm has flown the older variants of the same aircraft flown by the PLAAF. Allen, Krumel, and Pollack provide a useful description of PLA aircraft acquisition programs in Appendix E, pp. 221-9.

¹⁰⁵¹ The PLAN submarine bases were perhaps influenced by Soviet advisors; during discussions with the Allies in the 1940s and with Mao in 1950, Stalin had expressed interest in establishing a Soviet submarine base at Pt. Arthur (Lushun).

¹⁰⁵² John E. Moore and Richard Compton-Hall, *Submarine Warfare: Today and Tomorrow*, London: Adler & Adler, 1987, pp. 195, 201.

1950s and the 1960s, Beijing invested heavily in developing nuclear-armed missiles and the nuclear-powered submarines to launch them. This policy came to fruition in China's 1964 detonation of a nuclear device and the 1988 commissioning of a nuclear-powered fleet ballistic missile submarine (SSBN).¹⁰⁵³

America's involvement in Vietnam and Taiwan's failure to act on its invasion rhetoric meant that China faced no overseas threat during the decade.¹⁰⁵⁴ The PLAN remained organized in three operating fleets, each facing discrete "theaters": the North Sea Fleet was primarily responsible for countering the Soviet naval threat; the East Sea Fleet focused on Taiwan; the South Sea Fleet was on the immediate sidelines of the Vietnam conflict.

1970s

Mao Zedong reportedly directed the development of a modern navy in May 1975 at a meeting of the Central Military Commission (CMC).¹⁰⁵⁵ He may have been reacting both to the Soviet threat and to the development of a powerful navy by China's ancient protagonist and most recent invader, Japan.

PLAN missions in the 1970s included combating criminal activities such as smuggling, piracy, and illegal immigration; life saving; and safety of navigation. The navy's first priority, however, remained defending against possible Soviet amphibious assault. The Soviet Navy in the late 1970s and 1980s was in a position to threaten sea lines of communications vital to Beijing's rapidly increasing merchant marine, as Soviet maritime forces maintained continual naval presence in the Indian Ocean and North Arabian Sea. The Soviet Pacific Fleet almost doubled in size during the 1970s and was improved by the addition of Moscow's latest combatants, including nuclear-powered and armed surface ships and submarines. Soviet merchant and fisheries ships were also omnipresent in Pacific waters historically vital to China's economic interests.

Beijing's second maritime priority was securing offshore territorial claims. Taiwan was the most important of these, but the South China Sea was also significant. Successful action against South Vietnamese naval forces in 1974 resulted in Chinese possession of the disputed Paracel Islands, located in the northern part of that sea.

¹⁰⁵³ Richard Sharpe, ed., *Jane's Fighting Ships: 1995-96*, London: Butler and Tanner, 1996, p. 114, states that China built two *Xia*-class fleet ballistic missile submarines, patterned on the U.S. *George Washington*-class/Soviet *Hotel*-class: A.D. Baker, III, ed., *The Naval Institute Guide to Combat Fleets of the World, 2000-2001: Their Ships, Aircraft, and Systems*, Annapolis, MD: Naval Institute Press, 2000, does not repeat this claim.

¹⁰⁵⁴ Presumably, the United States would have come to Taiwan's defense had the PRC tried to take advantage of the American preoccupation with Vietnam by attacking the island, but the GPCR was even more of a preoccupation for Beijing.

¹⁰⁵⁵ FBIS reports, cited in Muller, p. 154.

The Soviet naval base at Cam Ranh Bay in Vietnam was flourishing as the 1970s ended, and the fight over the Paracels indicated that other claimants to the islands and reefs of the South China Sea would not accede meekly to Beijing's territorial claims. Hence, the South Sea Fleet's organization was significantly changed: the Marine Corps, first formed in 1953 but disbanded in 1957, was reestablished in 1980 as an amphibious assault force and assigned to the southern fleet. The PLAN's slender amphibious assets were concentrated in the south, as that fleet's training regimen began including "island seizing" exercises. In 1980, for instance, a major fleet exercise in the South China Sea focused on the seizure and defense of islands in the Paracels.¹⁰⁵⁶

1980s

PLAN force structure in 1980 for the first time centered on Chinese-built warships. Although still heavily reliant on Soviet designs, the *Luda*-class guided-missile destroyers, *Jianghu*-class frigates, and fast-attack missile-boats marked a significant increase in China's maritime capability.¹⁰⁵⁷ The submarine force included the first Chinese-built nuclear-powered attack submarines, as well as about 60 conventionally powered boats. A seaborne nuclear deterrent force continued under development, following Mao's command "to make [the navy] dreadful to the enemy."¹⁰⁵⁸

Mao's passing from the scene in 1976 limited the effort to modernize the PLAN, however, as Deng Xiaoping put forward a continentalist strategic perspective. Deng selected another general to command the navy, an officer who had worked for him previously. General Liu Huaqing held substantive (general/admiral) rank senior to that (lieutenant general/vice admiral) normally held by the PLAN commander, a sign of Deng's determination to improve the navy.

Liu exerted a strong force on naval developments as commander of the PLAN from 1982-1987, and then Vice-Chairman of the CMC until 1997. He is best known for promulgating a three-stage maritime strategy that provided justification on which PLAN officers and other navalists could base their plans for a larger, more modern navy--a process Liu supported, but at a very moderate pace.

Probably most important, however, were Liu's accomplishments reorganizing the navy, redeveloping the Marine Corps, upgrading bases and research and development

¹⁰⁵⁶ Tai Ming Chueng, *Growth of Chinese Naval Power: Priorities, Goals, Missions, and Regional Implications*, Singapore: Institute of Southeast Asian Studies, 1990, p. 28. China's marine corps had been disbanded in 1957 as "unnecessary."

The concentration of amphibious forces in the South rather than the East Sea Fleet may reveal the PLAN's attitude—ambivalent at best—toward the very difficult task of conducting an amphibious assault against Taiwan.

¹⁰⁵⁷ John E. Moore, ed., *Jane's Fighting Ships: 1976-77*, New York: Franklin Watts, 1977, p. 100ff. The PLAN also included the first Chinese range-instrument ships for tracking guided-missile flights, and the first Chinese-built amphibious transports.

¹⁰⁵⁸ Muller, p. 171.

facilities, and restructuring the naval school system.¹⁰⁵⁹ China's widening maritime concerns and increased budget resources in the 1980s raised interest in a strong modern navy. PLAN modernization proceeded along three paths--indigenous construction, foreign purchase, and reverse engineering--much as had Li Hongzhang's "self-strengthening" navy a hundred years earlier. The 1980s program proceeded at a measured pace, however; Beijing did not embark on a major naval expansion program.

Foreign purchases were concentrated in the west, with the United States sold China a small number of modern ship engines and torpedoes, and western European nations sold other weapons and sensor systems. Indigenous construction included guided-missile destroyers and frigates, replenishment-at-sea ships, and conventionally and nuclear-powered submarines. The PLAN acquired its only *Xia*-class fleet ballistic missile submarine in 1982. The successful submerged launch in 1988 of the *Julong-1* (JL-1) intermediate-range ballistic missile (IRBM) from this submarine meant that China for the first time could deploy nuclear strategic weapons at sea.¹⁰⁶⁰ The *Xia* was one of a kind, however, and other than being home ported with the North Sea Fleet to facilitate engineering support,¹⁰⁶¹ its commissioning did not result in the PLAN organizing a dedicated nuclear strategic force.

During this decade the PLAN also demonstrated increasing capability in other maritime missions. Protecting offshore petroleum assets, other seabed minerals, and fisheries received increased attention,¹⁰⁶² but did not dictate fleet reorganization.

¹⁰⁵⁹ Liu's accomplishments are summed up in Alfred D. Wilhelm, Jr., *China and Security in the Asian Pacific Region Through 2010*, CRM 95-226, Alexandria, VA: Center for Naval Analysis, 1996, p. 43.

¹⁰⁶⁰ See John Wilson Lewis and Xue Litai, *China's Strategic Seapower*, Stanford: Stanford University Press, 1984, for the best account of the development of the FBM and JL-1 programs. A successful 1982 launch was made from a submerged platform; a 1985 attempt from the *Xia* failed; a 1988 attempt succeeded. The *Xia* itself apparently has been a failure, never operating on a regular basis. *Jane's Fighting Ships, 1999-2000*, p. 115, repeats a continuing report that the second *Xia* was destroyed in a 1985 accident before it could go to sea.

Liu has been compared to Alfred Thayer Mahan, the great American maritime strategist, but it would be more accurate to compare Liu to Admiral John Fisher, the British First Sea Lord in the first decade of the 20th century who completely reorganized the Royal Navy.

¹⁰⁶¹ Author's discussion with Senior-Colonel (formerly Senior Captain) Wang Jue (May 2000), who had spent his career as a PLAN nuclear engineer, only to end up as DCOS for Militia and Reserve Affairs for the Qingdao Garrison. A conventionally-powered submarine copied from the Soviet's *Gulf II*-class was also built; it is still operational as a missile test-platform.

¹⁰⁶² See, for instance, Michael Leifer, "Chinese Economic Reform and Defense Policy: The South China Sea Connection," paper presented at the IISS/CAPS Conference,

China invested in four large space-surveillance ships to support its growing military and commercial space program, with these ships conducting the first long-range PLAN deployments in support of space launches in 1980. Task forces also supported scientific expeditions to the Arctic and Antarctic. The navy's operational exploits were accomplished by an organization that had changed little since its founding in 1950.

ADMINISTRATIVE ORGANIZATION OF THE NAVY

The PLAN was downsized as part of Beijing's 1985 decision to reduce the size of the PLA.¹⁰⁶³ Its strength was approximately 270,000 personnel in 1995, about 9 percent of the overall PLA's strength. PLAN strength was 250,000 personnel at the end of 1998 (about 10 percent of the PLA's total strength). This number was scheduled for a 10 percent reduction by mid-2000, as part of the three-year, 500,000-man cut in PLA strength announced by Jiang Zemin in 1997.¹⁰⁶⁴ This downsizing is part of the effort to reorganize the PLA for future warfare, where personnel skill and technological competence count more than mass:

- (1) Active duty PLA forces will become quantitatively smaller, with an emphasis on technological quality;
- (2) Reserves and the People's Armed Police (PAP) will increase in size;
- (3) The PLA will retain many existing weapons and attempt to develop new tactics and techniques to defeat a high-technology enemy;
- (4) Only limited amounts of foreign weapons and equipment will be introduced into the forces; the indigenous Chinese defense industry will be the source of the majority of modern weapons;

Hong Kong, July 1994; and John W. Garver, "China's Push Through the South China Sea: The Interaction of Bureaucratic and National Interests," *China Quarterly*, December 1992, pp. 1019, 1022.

¹⁰⁶³ See Nan Li, "Organizational Changes in the PLA, 1985-1997," *China Quarterly*, June 1999, p. 330, who also notes that all headquarters were reduced by 25 percent as part of this reduction.

¹⁰⁶⁴ The 270,000 figure is contained in Kuan Cha-chia, "Commander Jiang Speeds Up Army Reform, Structure of Three Armed Services To Be Adjusted," Hong Kong *Kuang chiao ching*, No. 305, 16 February 1998, in FBIS-CHI-98-065, 6 March 1998. PLAN strength is given as 230,000 by The Institute for Strategic Studies, *The Military Balance, 1999-2000*, London: Oxford University Press, 1999, p. 187, but the number 250,000, and the 10 percent cut in manpower, is from the author's interviews in October 99. Dennis J. Blasko, "A New PLA Force Structure," in James C. Mulvenon and Richard H. Yang, eds., *The People's Liberation Army in the Information Age*, Santa Monica, CA: RAND, CF-145-CAPP/AF 1999, pp. 263-4, notes that China's July 1998 Defense White Paper states that PLA ground forces will be reduced by 19 percent, naval forces by 11.6 percent, and air forces by 11 percent, which would equal a reduction of about 418,000 ground forces, 31,000 naval personnel, and 52,000 air force personnel.

- (5) Capabilities will emphasize rapid response and joint operations, focusing on precision attack, air operations, naval operations, information warfare, and space operations; and
- (6) Command and control organization will be reorganized to better manage the requirements of future warfare.¹⁰⁶⁵

Since the majority of this reduction will affect the army, the navy's percentage of overall PLA strength should increase. These points will affect the navy's administrative and operational practices, but are not likely to require changes to basic fleet organization.

Although the PLAN is and will almost certainly remain the smallest of China's conventional armed services, it may exert influence in PLA policy determination out of proportion to its size. This is evidenced by the fact that the PLAN probably receives as much as one-third of the PLA budget, although it comprises no more than about 13 percent of the two million PLA personnel.¹⁰⁶⁶

PLAN size is only one indicator of its importance in Beijing's view. The navy's strategic missions are also important. A likely list of China's strategic military goals include the following, all of which require a strong navy to:

- (1) Defend China's borders and territories, especially if they are subjected to military challenge (e.g., Russia, India, Vietnam....);
- (2) Establish secure and recognized maritime boundaries for China, especially in contested areas of the South China Sea and along China's continental shelf;
- (3) Guarantee China against external intervention, coercion, or dictation by other great powers;
- (4) Back up Chinese diplomatic efforts to avoid permanent separation and ultimately achieve recovery of territories (by force if necessary) wrested from China by foreign powers—primarily Taiwan and the Senkaku (Diaoyu) islands; and
- (5) support China's ultimate emergence as a world power with "comprehensive strength."¹⁰⁶⁷

¹⁰⁶⁵ Blasko, "A New PLA Force Structure," pp. 262-3.

¹⁰⁶⁶ Alexander Huang, "The Chinese Navy's Offshore Active Defense Strategy: Conceptualization and Implications," *Naval War College Review*, v. XLVII, No. 3 (Summer 1994), p. 9. These figures do not address national defense expenditures that are not included in the nominal PLA budget, such as foreign purchases of Su-27 and Su-30 aircraft, *Kilo*-class submarines, and *Sovremenny*-class destroyers. Other defense costs that may not be included in the PLA budget include pensions, research and development, training conducted at civilian schools, and China's space program.

¹⁰⁶⁷ This list is adopted from Charles W. Freeman, Jr., "China, Taiwan, and the United States," in Selig S. Harrison and Clyde V. Prestowitz, Jr., eds., *Asia After the*

These missions should make the PLAN commander an important military participant in the national security policy apparatus, along with the heads of the PLAAF, the Second Artillery, and China's seven military regions (MR).¹⁰⁶⁸ His actual influence, however, is likely tied directly to specific maritime missions and/or to the degree of crisis felt about the strategic issue of the moment.

Seven Roles of the PLAN Commander

Admiral Shi Yunsheng rose to command of the PLAN through a series of operational and administrative assignments. He is a naval aviator and served in senior positions in both the North and South Sea Fleets, including command of the PLANAF forces that participated in the 1988 battles against Vietnam in the South China Sea.¹⁰⁶⁹ Shi has to "wear more than one hat" as PLAN commander.

Operational Tasking. First, as the senior officer in the PLAN, he is responsible for directing the operational tasking of the navy in accordance with the determination of national security objectives. The most important facet of this responsibility is ensuring that the PLAN is ready to fulfill its role in national tasking ranging from combating piracy to preparing for various operational options regarding Taiwan.¹⁰⁷⁰

"Miracle": Redefining U.S. Economic and Security Priorities, Washington, D.C.: The Economic Strategy Institute, 1999, p. 172.

¹⁰⁶⁸ See Swaine, pp. 43ff, who discusses a wide range of participants in the national security policy-making process, including retired senior officers and those heading up the National Defense University (NDU) and Academy of Military Science (AMS).

I will not discuss formal organizational or bureaucratic-behavior theory, but note that I assume the national security policy-making process in China has many of the same characteristics as that in western countries and Japan, where the formal structure of decision-making, from the determination of national objectives to the allocation of finite amounts of resources to specific programs, operates amidst an environment of personal relationships and less formal discussion/decision-making. Various elements in the defense bureaucracy, for instance, no doubt contain individuals, military or civilian, who by virtue of longevity and/or special expertise, are able to influence policy to a degree out of proportion to their titular position.

¹⁰⁶⁹ David Shambaugh, "China's Post-Deng Military Leadership," in James R. Lilley and David Shambaugh, eds., *China's Military Faces the Future* Washington, D.C.: AEI/M.E. Sharpe, 1999, p. 27.

¹⁰⁷⁰ Another aspect to his operational responsibility is Shi's role in gaining authorization from the national policy-making apparatus for tasking the navy wants to execute—such as a multi-ship deployments to foreign nations—by presenting it as beneficial to China in order to gain official sanction.

Resources. Second, as representative of the PLAN in Beijing, Shi serves as advocate for his service in the resource allocation process—in PLA budget battles, in other words. His personal effectiveness in this role is not easily discernable, since current major equipment modernization programs such as the acquisition of *Kilo*-class submarines, *Sovremenny*-class destroyers, *Song*-class submarines, Ukrainian-built gas turbine engines, and various foreign weapons and fire-control systems, were initiated before he assumed his present office.

Education. Third, equally as significant as this equipment modernization, however, may be organizational changes that have occurred since Shi assumed office in 1997. A potentially significant change is the ongoing restructuring of the training and education establishment, from officer accession to ship crew training. The PLAN also operates its own academic research institute (the Naval Research Institute) and equipment research institute (the Naval Research Center) in Beijing, which follow the direction of the navy commander.¹⁰⁷¹

The PLAN is emulating the U.S. reserve officer-training corps (ROTC) programs for producing well-educated, technically oriented candidate officers.¹⁰⁷² Agreements

Author's interviews with PLA officers reveal that Naval Headquarters in Beijing, in late October or early November, nominates to the CMC countries to be visited by PLAN ships during the following calendar year. Nominations are based on visits the PLAN Headquarters or fleet commanders think will serve Chinese and PLAN purposes. These employment plans are submitted to the First Office of the Ministry of Defense for vetting and if approved, to the CMC for approval. Once national approval is gained, ship selection and preparation is the responsibility of the navy offices and fleet headquarters designated by PLAN Headquarters. Typical preparations for a significant foreign deployment would include ship selection from different fleets, to pick the most operationally ready and best looking ships, as well as those with the most proficient commanding officers (CO). An effort is also made to "share the wealth" among the fleets, by rewarding those units that have performed unusually well. Once selected, the ships' COs and crews are "frozen," to ensure continuity throughout the special deployment. Additional crewmen and officers are also usually assigned to increase the number of personnel benefiting from the special deployment (a procedure especially followed in the case of the 1997 PLAN deployment to North and South America). The ships are assigned a dedicated supply officer to help them prepare for the deployment, may receive special training for a particularly long deployment, and their crews receive cultural familiarization lectures.

¹⁰⁷¹ Li Jun-ting and Yang Jin-he, eds., *Overview of the Chinese Armed Forces*, Beijing: People's Publishing Agency, 1989, p. 232. I am indebted to David Finkelstein for explaining the different missions of these two organizations: the *Haijun junshi xueshu yanjiusuo* and the *Haijun zhuangbei lunxheng yanjiu zhongxin*.

¹⁰⁷² The author first discussed with PLA officers implementing an ROTC-like program in China in 1993; discussions since then between U.S. and PRC National Defense University (NDU) faculty--which typically occur at least twice a year--have

are being signed between MR headquarters and civilian universities located in their respective military regions through which the university receives compensation for producing military officer candidates.¹⁰⁷³ The navy is pursuing an especially ambitious ROTC-type program, with a goal of eventually producing no less than 40 percent of the PLAN officer corps from civilian universities.¹⁰⁷⁴

The navy is also participating in the general overhaul of PLA service academies,¹⁰⁷⁵ following Jiang Zemin's demand that academy education "strengthen the

almost always included ROTC as a discussion topic. The modern, highly successful American Naval ROTC program was initiated in 1946 (the Holloway Program) with the goal of organizing units at prominent U.S. universities to produce officers educated in technical and engineering curricula.

¹⁰⁷³ Author's interview with senior PLA officer. Also see, for instance, Xiang Jiajun and Zhang Xuanjie, Beijing *Xinhua*, 28 May 1999, in FBIS-CHI-99-0601, for the report that the "Second Artillery Corps signed an agreement with the Northwest Engineering University in Xian today to cultivate cadres for guided missile troops" and will "supply a certain number of outstanding university and graduate students for the Second Artillery Corps every year," with the Corps establishing a "national defense scholarship" at the school to "encourage and fund" likely students. A similar report is found in Liu Jianxin, Beijing *Xinhua* 28 October 1999, in FBIS-CHI-99-1103, for the report that the "Guangzhou Military Region and Wuhan University have signed an agreement on jointly training military cadres....this military region will...expand the selection of outstanding personnel from institutions of higher learning across the country....All major military regions and armed services have separately designated one local university to be the designated school for training their own cadres."

¹⁰⁷⁴ Beijing *Xinhua*, 17 August 1999, in FBIS-CHI-99-0817: "The Chinese navy plans to recruit about 1,000 officers from non-military universities and colleges yearly beginning this autumn in an effort to meet its need for command and technical talent....[these officers] will account for 40 percent of all naval officers by the year 2010. Also see *Xinhua* Hong Kong Service, 21 June 1999, in FBIS-CHI-99-0622, for the note that these civilian university programs will be linked to the military academy structure. This linkage is no doubt intended to maintain control of the ideological as well as the subject-matter content of the "civilian" program—the latter long a concern within the U.S. Naval ROTC program.

¹⁰⁷⁵ See, for instance, *Xinhua* Hong Kong Service, 21 June 1999, in FBIS-CHI-99-0622, for a *Jiefangjun bao* report that the number of academies are being reduced in the interest of making individual schools larger and more efficient. A 20 June 1999 *Straits Times* article entitled, "China Sets Up Defense Campus," reported that the PLA "has set up a new National Defence Science and Technology University" in Changsha, and "directly under the command of the CMC" will offer a wide range of courses at the general staff college (0-5/0-6) level.

military through science and technology.”¹⁰⁷⁶ In Wuhan, the former Navy Engineering Academy and Navy Electronics Engineering Academy have been merged into the Engineering University of the Navy. The new school, established in June 1999, reportedly awards undergraduate degrees and has graduate programs in 35 subjects.¹⁰⁷⁷ The university's thirteen departments seem to focus on advanced technological areas that address the putative "revolution in military affairs" (RMA), including warship kinetic engineering, electronic information and naval arms engineering, and command and electronic warfare engineering.¹⁰⁷⁸

Shipboard Training. Fourth, education for ships' crews previously occurred almost entirely aboard ship. Within the past decade, however, the PLAN has created more centralized schools and training facilities to help teach personnel how to operate modern shipboard systems.

These new schools and training centers are operated by each fleet's naval base commands, and have been established to teach engineering, surface warfare, ship handling, aviation operations, submarine warfare, and medical operations, in addition to addressing specific equipment systems.¹⁰⁷⁹ The East Sea Fleet, at least, also has established a petty-officer leadership school, in Shanghai, which draws its students from ship and aircraft squadron personnel who have reenlisted.

Logistics. Fifth, in the vital but unglamorous area of logistics, the PLAN has been trying to modernize its support systems during Shi Yunsheng's term in office. He has devoted considerable attention to improving the Navy's General Logistics Command.¹⁰⁸⁰ Shi is reportedly building a "modern logistic support system," to include oil and water supply systems for the fleet, as well as surveying, salvage, transport, and

¹⁰⁷⁶ "Put Military Academy Education in a Strategic Position of Priority Development," *Jiefangjun bao*, 23 June 1999, in FBIS-CHI-99-0629. During the past year, there have been numerous reports of military academy reform; for another "ROTC" plan, see Zhang Jiajun and Zhang Xuanjie, *Xinhua*, 28 May 1999, in FBIS-CHI-99-0601: "The Second Artillery Corps signed an agreement with the Northwest Engineering University in Xian today to....supply a certain number of outstanding university and graduate students for the Second Artillery Corps every year. The Second Artillery Corps will establish a national defense scholarship...to encourage and fund outstanding students...."

¹⁰⁷⁷ Li Xianfang and Liu Haiyang, *Xinhua*, 17 June 1999, in FBIS-CHI-99-0617.

¹⁰⁷⁸ Rear Admiral (RADM) Shao Zijung (college president), quoted in, "Navy Engineering College Is Aimed at Developing New Naval Military Talent," *Xinhua* 7 August 1999, in FBIS-CHI-99-0826.

¹⁰⁷⁹ Author's conversation with senior PLA officers; also, Xu Sen, "Building a Modern Naval Battlefield—Overview of the Naval Vessel Training Center," *Jiefangjun bao*, 15 September 1999, p. 6, in FBIS-CHI-99-0923.

¹⁰⁸⁰ Lin Jun-ting and Yang Jin-he, pp. 244, 245.

hospital ships. Improved ship maintenance is being pursued, as is better support for equipment maintenance and repair.¹⁰⁸¹

Shi is also working to implement the PLA's General Logistics Department's plan to establish a joint logistics service for all services in order to improve the timeliness and effectiveness of PLA logistics, including privatization of some parts of the system.¹⁰⁸² Under this plan, currently being implemented to include creation of joint "naval-air-ground rapid-response logistics units,"¹⁰⁸³ the navy will remain responsible for specific requirements linked to operations at sea, such as providing shipboard supplies and harbor facilities.

A major effort to reorganize the naval base structure to improve management and availability of supply activities both afloat and ashore is part of this PLAN program. This includes provisioning, repair and maintenance, medical care, and technical systems support of naval units and activities.¹⁰⁸⁴ There is no firm evidence, however, that the PLAN is establishing such facilities abroad.¹⁰⁸⁵

Inter-Service Relations. Sixth, Shi Yunsheng presumably is expected to wear a joint (or "purple," in U.S. parlance) hat as a senior member of China's military hierarchy. The importance of ensuring the close coordination of efforts by all services--joint warfare--was brought home to the PLA by the allied victory against Iraq in Desert Storm in 1991. To further jointness, Shi must subsume PLAN priorities within national defense plans that may reduce the navy's share of defense resources.

This "hat" is probably more complex for senior PLA officers than for their foreign counterparts, because of the relationship between the CCP and the PLA: maintaining a

¹⁰⁸¹ Quoted in Huang Caihong, Chen Wanjun, and Zhang Zhao, "China Enhances the Navy's Comprehensive Strength—Interview with Naval Commander VADM Shi Yunsheng," Beijing *Liaowang*, No. 16, 19 April 1999, pp. 13-15, in FBIS-CHI-99-0513.

¹⁰⁸² "Zhang Wannian Steps Up Military Logistics Reform," *Xinhua*, 9 December 99, in FBIS-FTS19991209000883, cites Zhang's statement that "it is imperative for the military to commercialize its logistics in this period of modernization."

¹⁰⁸³ Jianxiang Bi, p. 11. Huang, Chen, and Zhang, describe "naval port cities" being designated as central distribution points in the new logistics system.

¹⁰⁸⁴ See, for instance, Huang Caihong, Chen Wanjun, and Zhang Zhao, "The PLA Navy Has Enhanced Comprehensive Combat Effectiveness," *Xinhua*, 19 April 1999, in FBIS-CHI-99-0423. Even in the logistics area, Shi has been able to build on his predecessor's work: the PLAN's most significant overseas deployment to date, the three-ship visit to the Americas in 1997, which occurred before Shi was appointed to command the navy, is cited as evidence of the navy's enhanced logistics capability by Tai Ming Cheung, p. 237.

¹⁰⁸⁵ There has been considerable speculation in the open press, especially among Indian analysts, that China has established facilities at Burmese coastal and island sites to support a PLAN presence, but U.S. and Taiwan analysts do not support these accusations.

"party army" strains the process of military modernization. "Red" versus "expert" may be too stark a phrase to use, but increasing military professionalism is clearly one of Beijing's goals and is not likely facilitated by the continuing priority placed on ensuring an ideologically oriented military loyal to the CCP. In other words, Shi Yunsheng must not only be "purple," he must also be "red."¹⁰⁸⁶

International Responsibilities. Seventh, Shi represents China in his relations with foreign navies. He has traveled to the United States, most recently in April 2000, and in November 1999 made a trip to France and Egypt accompanied by his East Sea Fleet Commander. This may simply represent tasking from the CMC, but also reflects Shi's personal interest in foreign navies and a degree of cosmopolitanism perhaps not common among all senior PLA commanders.¹⁰⁸⁷

These seven points indicate that Shi Yunsheng has been an active navy chief, but evaluating his effectiveness requires information that is difficult to access, given the opaqueness of PLA headquarters. There are factors arguing in favor of his limitations as commander: first, he had a hard act to follow: with the retirement in September 1997 of Liu Huaqing as CMC vice-chairman, the PLAN (and its commander) lost an advocate at the highest level of China's defense establishment. Liu certainly wore "purple" and "red" hats, but is also the father of the current modernizing process in the PLAN. Shi does not have Liu's stature, because of his lack of a personal relationship with Jiang Zemin, lack of similar experience in the PLA, and because of his relatively junior rank among the heads of the services.¹⁰⁸⁸ Writing circa 1997, Michael Swaine does credit the PLAN with behaving as a quasi-independent bureaucratic actor....pushing for a greater

¹⁰⁸⁶ See James C. Mulvenon, *Professionalization of the Senior Chinese Officer Corps: Trends and Implications*, Santa Monica, CA: RAND, 1997, for the best current analysis of the ongoing professionalization of the PLA's senior officer corps.

¹⁰⁸⁷ Author's conversation with U.S. Navy analysts in November 1999 included the suggestion that Shi and Yang visited France to discuss purchase of follow-on technology to the *Exocet* anti-ship cruise missiles previously acquired by China and used as the model for the Chinese-built C-800 series missiles; the visit to Egypt was conjectured to be in connection with a possible multi-ship PLAN deployment to the Mediterranean being planned by Shi. As noted above, this (November) is about the timeframe for such proposals to be forwarded to the Defense Ministry by the Naval Headquarters.

Author's discussion with Admiral Shi's U.S. escort officer for his April 2000 visit to the United States revealed that Shi was most interested in U.S. naval aviation programs; C4ISR; officer and enlisted recruitment, retention, and training programs; and USCG roles, missions, and relationship with the U.S.N.

¹⁰⁸⁸ Shi, appointed PLAN commander in September 1997, was finally promoted to full admiral in June 2000. This promotion may merely represent his longevity and distinguished career, but Swaine does identify Shi as one of "the most influential (and vocal) bureaucratic players in formulating and supervising critical components of policy." See Swaine, p. 45.

recognition of its institutional viewpoint in the senior levels of the PLA leadership, with significant success....as the major...proponent of the creation of a technologically sophisticated, operationally versatile blue water force, although he notes that the "pace and direction of naval modernization remains a major subject of debate" among PLA leaders, with the PLAN viewpoint "often challenged by the ground forces orientation of the [General Staff Department] GSD."¹⁰⁸⁹ Within the navy itself, Shi's effectiveness may be limited by the fact that he has spent his entire operational career in aviation units, and has had no shipboard experience.¹⁰⁹⁰

FORCE STRUCTURE

Admiral Shi categorizes the PLAN force structure as comprising five "major arms systems:"

- (1) Naval surface vessel units;
- (2) Naval submarine units;
- (3) Naval aviation units;
- (4) Naval coastal defense units; and
- (5) Marine Corps.¹⁰⁹¹

The "Chinese Naval Officer's Manual" lists operational level duties for these PLAN "systems," or warfare communities. The surface fleet is responsible for:

- (1) Attacking enemy warships;
- (2) Anti-submarine warfare (ASW);
- (3) Amphibious warfare;
- (4) Coastal defense; and

¹⁰⁸⁹ Ibid., p. 47.

¹⁰⁹⁰ This would be a significant problem in the U.S. Navy, among others; in fact, an officer of such narrow experience would not be selected to head the U.S. Navy. Historically, there have been very effective heads-of-navy with very limited or no seagoing experience (Alfred von Tirpitz, in early 20th century Germany, for instance), but they are the exception. Key to evaluating the durability of Shi's influence on the direction of modernization and strategic development in the PLAN would be knowledge of how many and influential are his acolytes in the naval officer corps, especially at the flag officer level.

¹⁰⁹¹ Quoted in "Interview with Shi." Also see Ren Yanjun, "Forging A Shield of Peace for the Republic—Part 1 of Roundup on 50 Years of Achievements in Army Building," *Jiefangjun bao*, 6 September 1999, pp. 1-2, in FBIS-CHI-99-0911; and Xu Zuzhi, "Backgrounder on National Day Celebrations," *Zhongguo xinwen she*, 1 October 1999, in FBIS-CHI-99-1002. These press accounts all make a point of citing Shi's role in PLAN modern developments, leading to "greatly improved combat capability."

- (5) Maritime surveillance; mine warfare, merchant ship convoys, search and rescue (SAR), and logistics.
- (6) Interdicting enemy logistics;
- (7) Attacking enemy naval bases and coasts; and
- (8) Maritime patrol and reconnaissance, mine warfare, logistic lift [!], and SAR.

The submarine force is responsible for strategic nuclear strikes;

The PLANAF's responsibilities include

- (1) Anti-surface warfare (ASUW);
- (2) Attacking enemy naval installations;
- (3) Defending PLAN surface and submarine forces during offensive operations;
- (4) Amphibious warfare, and anti-air warfare (AAW); and
- (5) Maritime reconnaissance, ASW, mine warfare, early warning, communications, SAR, and logistic lift.

Finally, the Marine Corps is assigned

- (1) Amphibious warfare;
- (2) Forward base seizure; and
- (3) Coastal defense. ¹⁰⁹²

Administration

The PLAN Commander is headquartered in Beijing, where the navy's Political Commissar is usually his equivalent in rank (see Figure 10.1 and 10.2). Nominally, the Commander and the Political Commissar are also equivalent in authority.¹⁰⁹³ There are three vice admirals as deputy commanders of the PLAN, as well as two deputy

¹⁰⁹² These lists are quoted in Srikanth Kondapalli, "China's Naval Structure and Dynamics," *Strategic Analysis*, vol. XXIII, October 1999, pp. 1097-1109.

¹⁰⁹³ Seniority among officers of the same rank is based on "date of rank": if an officer is promoted to vice admiral on 1 June and a second officer is promoted to the same rank a day later, the first will always be senior to the second, so long as they both are vice admirals. This is not to say, however, that the second officer may not be assigned to a billet in which he is more influential than his nominal senior: in the PLAN the billet may also dictate "seniority;" in the case cited, even if the navy's political commissar was promoted to vice admiral earlier than the navy's commander, the latter would still be "senior" to the former.

commissars, a vice admiral and a rear admiral. The former includes personnel affairs among his duties, while the latter serves as PLAN Inspector-General.¹⁰⁹⁴

The headquarters is organized into four departments, with the PLANAF Headquarters constituting a fifth (Aviation) department. The Headquarters, Political, and Aviation Departments are headed by vice admirals; the Logistics and Equipment Departments by rear admirals. Management of the personnel system is an important function within the Political Department, where it is directed by a rear admiral with a direct line of communication to the PLAN political commissar. This office manages the PLAN officer promotion system, which uses a system of committees.

PLAN officers are commissioned at the naval base level. Their diplomas (if they are naval academy graduates) are signed by the academy commander; their commissions are signed by the commander and the political commissar of the naval base at which they are first stationed following graduation.

Officers with the seniority and qualifications to be considered for promotion to lieutenant, lieutenant-commander, and commander are considered for promotion by a personnel committee at their parent naval base. The committee is chaired by the base political commissar and the base commander (usually a senior captain) has the authority to approve the promotion of those selected. Hence, the promotion system, as it does in most navies, gives a shore commander rather than a sea-going commander the authority to promote or not promote officers stationed in operational fleet units. If the PLAN conforms to common naval practice, however, a sea-going officer's promotability is strongly affected by reports of efficiency from his/her operational commander. Moreover, the base commanders likely have had several successful assignments at sea, or they would not have been promoted to their senior rank and selected for such responsible positions.

The role played by the unit political commissar in officer promotion is important: officer evaluations are undoubtedly based on estimates of both ideological reliability and professional expertise, but the balance between the two is not clear. Some analysts of the PLA believe that professional performance is increasingly important, and that the political commissar's job is increasingly that of a personnel manager and "human resources" specialist, rather than ideological policeman—although that role certainly remains.¹⁰⁹⁵

Selection for promotion to the rank of captain is made at each of the three geographic fleets by a committee headed by the fleet political commissar. The fleet commander has the authority to approve the promotions of the officers selected.

Promotion nominations to the ranks of senior captain, rear admiral, and vice admiral occur at PLAN headquarters. The PLAN political commissar nominally chairs

¹⁰⁹⁴ PLAN organization and office holders are identified through the *Directory of PRC Military Personalities*, October 1999, Honolulu: Serold Hawaii, Inc., 1999, USCINCPAC sources, and PLA sources. The author will note where sources differ.

¹⁰⁹⁵ For instance, see Harlan Jencks, who estimates that current PLA officers spend more than 70 percent of their "day" in professional training and less than 30 percent in ideological education, this was a reversal of the employment percentages prevalent during the Great Proletarian Cultural Revolution of the 1960s and 70s.

the selection committee, which forwards the senior captain and various admiral promotion nominations to a CMC-level office or committee for final approval. Promotions to full admiral are rare and almost certainly a matter for the CMC. The entire PLAN officer selection and promotion system for vice admiral and below is overseen by the "Committee of the CCP of the Navy for Promotions and Major Policies," chaired by the PLAN commander.¹⁰⁹⁶

This is a complex process, but not noticeably more so than that employed in other militaries. The promotion system is notable, however, for the important role assigned to the CCP as managers of the PLAN officer corps.

Headquarters Department. (*siling bu*) The Headquarters Department is arguably the most important of the four PLAN departments in Beijing, since it is through this department that the chain of command runs to the three operational fleets. The Headquarters Department includes one office and four second-level departments, each headed by a senior captain (see Figure 10.3).

The *General Office* (*bangongting*) includes seven divisions:

- (1) Military Strategic Studies, which focuses on long-range planning and strategy;
- (2) Political-Military Affairs, which is organized into global geographic sections;
- (3) Military Assistants, which provides and coordinates the activities of administrative and executive assistants to senior PLAN officers in the headquarters; and
- (4) Operations, which performs the planning function for future fleet operations.

The second of the five Headquarters departments is the *Operations Department* (*zuczhan bu*), which transmits--and probably formulates--operational tasking directly to the three fleets. The third is the *Intelligence Department* (*qingbao bu*), which is organized into regional divisions--Western Hemisphere, Europe, Asia, West Asia, Africa--and performs the PLAN headquarters intelligence function. There are also Planning and Secretarial Offices. This department probably provides intelligence both *up*, to the PLAN commander, and *down*, to the fleet. The PLAN Intelligence Office's relationship to the CMC/PLA intelligence hierarchy is not clear.

The fourth department, the *Training Department* (*zunlian bu*), contains four divisions. These are responsible for PLAN academies (surface, sub-surface, aviation) and other officer schools.¹⁰⁹⁷ The Training Department also manages enlisted and officer equipment classroom training, and probably is the PLAN's primary point of contact with the GSD for training matters.

¹⁰⁹⁶ This discussion on promotions is based on the author's discussions with two PLAN senior captains.; additional information sources are certainly desirable.

¹⁰⁹⁷ There must be a special relationship between the PLAN Political Commissar/PLAN Political Office and the Political Academy in Qingdao.

The PLAN's Training Department's relationships with the GSD training department and with the geographic fleets' training departments are unclear. If the PLAN resembles the PLAAF in this regard, it participates in a GSD annual training conference that delineates the next year's training objectives. The PLAN Training Department would then "flesh out" this annual training plan to ensure the navy's operational objectives are met, and pass the plan to the geographic fleets for execution—possibly following additional modification at that level. Since each fleet faces a different sub-region, each may have specific training requirements.¹⁰⁹⁸

Finally, the Headquarters Department includes the *Military Affairs Department* (*junshi bu*). This organization is responsible for developing naval doctrine, writing and promulgating regulations, overseeing naval publications in general, and organizational structure (including recruiting). It would logically have a strong relationship with counterpart CMC departments, but that is not clear.

For instance, does the Military Affairs Department receive tasking directly from the CMC, or does its direction come strictly through PLAN headquarters? Does the Military Affairs Department receive input from the fleet and naval colleges? The Naval Command Academy at Nanjing has an operational (experimental) cell with the East Sea Fleet, which would furnish a logical path for recommendations about doctrinal and tactical development to reach PLAN headquarters from the fleet. The North and South Sea Fleets also have units designated to participate in doctrinal and tactical development, and in conducting trials of new equipment and systems.

Additionally, is recruiting coordinated at the CMC level to ensure an equitable distribution of available manpower among the various PLA services?

Political Department (*zhengzhi bu*). The second of the navy's headquarters departments is the Political Department, which serves the PLAN's political commissar as his avenue to fleet and unit commissars. It is divided into at least one office and four second-level departments: General Office and Personnel, Welfare and Recreation, Propaganda, and Cultural Affairs Departments (see Figure 10.4). Each of these organizations is replicated in the geographic fleet headquarters. The Political Department provides, on paper, a duplicative chain of command throughout the PLAN, which may be as much at the service of the PLAN commander as it is the PLAN's political commissar.

Logistics Department (*houqin bu*). The Logistics Department includes Headquarters, Supply, Finance, Ordnance, Civil Engineering, Transportation, and Medical (divided into Hospitals and Public Health bureaus) (second-level) (see Figure 10.5) Departments. These bear the responsibility for ensuring that the navy's shore

¹⁰⁹⁸ For instance, the South Sea Fleet would logically require an annual training regimen that devoted attention to discrete amphibious operations. A partial survey of annual, fleet-level training exercises, however, does not show the South Sea Fleet spending significantly more time on amphibious training than the North and East Sea Fleets. So perhaps the fleets faithfully execute the annual training plan as it is passed down from the PLAN Training Office.

establishment supports the operating units. It is also responsible for the PLAN's logistics reorganization currently in progress.

This department has important personnel responsibilities, as well: the Civil Engineering Department is in charge of family housing construction and maintenance. The Finance Department must ensure an efficient pay and benefits structure for navy personnel. The role of the Medical Department includes both the PLAN medical care system of clinics and hospitals, as well as medical care in operational units at sea and distant installations, such as the South China Sea islands outposts.

Equipment Department (*zhuangbei bu*). The Equipment Department includes second-level departments for Development, Construction, and Repair—each containing specific sections responsible for surface, subsurface, and aviation systems (see Figure 10.6). Additionally, there is an Employment Management Bureau, and Equipment Technology, Equipment Repairs, and Science and Technology Departments; as well as the Center for Equipment Feasibility (probably within the Naval Research Center).¹⁰⁹⁹ This department also manages PLAN weapons and test ranges, including the Underwater Ordnance Testing Ground offshore Shanghai and the missile and gunnery testing range near the Liaotung Peninsula.

PLANAF. The chain of command from Navy Headquarters runs through the Headquarters Department to the three operating fleets, but the vice admiral commanding the navy's air force (PLANAF) reports directly to the navy commander. He has two rear admirals as deputy commanders of his approximately 25,000 personnel and 800 aircraft.¹¹⁰⁰ The PLANAF Political Commissar is a vice admiral; his two deputies are rear admirals.

The PLANAF was organized in the early 1950s, and reportedly began shipboard operations in January 1980.¹¹⁰¹ It includes nine divisions of twenty-seven regiments of twenty-four or twenty-five aircraft each. This equates to about 650 aircraft; however,

¹⁰⁹⁹ Author's conversations with Dr. David Finkelstein of CNA and with PLA officers. The PLAN also possesses many supporting activities, including oceanographic research facilities; see "Key Ocean Study Established in Hangzhou," *Xinhua*, 7 November 1999, in FBIS-CHI-99-0079.

¹¹⁰⁰ Pacific Command (USCINCPAC) sources show the PLANAF reporting not directly to the Navy Commander but through the headquarters Staff Department.

¹¹⁰¹ Chen Wanjun and Sha Zhiliang, "Newsletter: Commanding the Winds and the Clouds Between the Sea and the Sky—A True Picture of the Shipborne Aircraft Unit of the People's Navy," *Xinhua*, 21 April 1999, in FBIS-CHI-99-0502, reported that a PLANAF helicopter unit began training for shipboard operations in the late 1970s, with the first successful operational flight occurring on 3 Jan 1980. Despite this article's purple prose, a 1980 date "fits" with the development of the PLAN's first helicopter-capable combatant, the *Luda II*-class DDG *Jinan*, which began construction in 1977.

estimates of total PLANAF total range from 513 to over a thousand.¹¹⁰² While the PLANAF historically has not kept pace with PLAAF aircraft acquisitions, the South Sea Fleet air arm has conducted mid-air refueling evolutions, albeit more than a year after the PLAAF first conducted these operations.¹¹⁰³

Geographic Fleet Organization

The three fleets are similarly organized into air, surface, and sub-surface force.

Each is nominally assigned three divisions (nine Air Regiments) of the PLANAF (a regiment includes approximately twenty-four aircraft). Each regiment in turn contains four Air Groups.¹¹⁰⁴ The fleet PLANAF arm includes land-based and seaplane patrol planes, bombers, fighters, helicopters, transport, and support aircraft.

Each geographic air commander is operationally responsible to his fleet commander, but receives administrative support from PLANAF headquarters in Beijing. Engineering, maintenance, supply, and training support is provided.

In addition to the aviation arm, each fleet includes large combatants (destroyers and frigates), small combatants (patrol boats), amphibious transports, mine warfare,

¹¹⁰² *Combat Fleets*, p. 103, estimates 485 fixed wing aircraft and 28 helicopters; *The Asia-Pacific Defence Reporter: 1998 Annual Reference Edition*, Vol. 24, No. 1, p. 43, estimates 490 aircraft; *Strategic Survey, 1999-2000*, London: IISS, p. 188, shows 566 aircraft; *Jane's Fighting Ships, 1999-2000*, p. 114, estimates "over 800 aircraft," but notes some of these are "laid up unrepaired." The highest estimate is 1,098, by Sidney Trevethan, on the Federation of American Scientists' website in March 2000 (www.fas.org/nuke/huide/china/agency/plan-af-orbat-st.htm).

¹¹⁰³ Robert Sae-Liu, "Chinese Expand Aerial Refueling Capability to Navy," *Jane's Defence Weekly*, 21 June 2000, reported that "PLA Navy fighters conducted their first aerial refueling mission in late March," using a PLAAF H-6 tanker while PLAAF refueling exercises have been conducted since at least late 1998. This is just the tip of the iceberg; at the April 2000 CNA conference on the PLAN, RADM Eric McVadon, USN (Ret.), former U.S. Defense and Naval Attache in Beijing, addressed this capability: now that the PLANAF and PLAAF have demonstrated the ability to conduct aerial refueling after many years of trying, how much longer will it take them to possess the operational capability to refuel numerous aircraft—including at night and in bad weather—when the mission requires refueling to reach their target and return home safely? He suggested it may well take several years to develop this level of proficiency on a sustainable basis.

¹¹⁰⁴ Interviews with PLA officers. Srikanth Kondapalli, "China's Naval Structure and Dynamics," *Strategic Analysis*, Vol. 23, October 1999, assigns eight (vice nine) divisions and twenty-seven regiments to the three fleets. The actual number assigned to each fleet probably does vary, in response to operational and administrative imperatives. In discussion with the author, some U.S. analysts questioned the existence of the "air groups," which may be formed for a particular tactical mission rather than exist as a permanent organizational structure.

replenishment-at-sea, and miscellaneous support ships. A senior captain serves as commander of the surface-forces flotilla and a senior captain as commander of the submarine flotilla, with each flotilla organized into squadrons of the same ship-type. Under this system, a squadron is composed entirely, for instance, of *Luda*-class destroyers, or *Jiangwei*-class guided-missile frigates (FFG), or *Ming*-class submarines (SS), and so on. These flotilla commanders report directly to the fleet commander; the flotilla commanders for small craft such as small patrol boat, harbor, and support vessels report to the local naval base commander.¹¹⁰⁵

The submarine force was organized in 1951, established its first base in 1952, at Qingdao, and began operating in June 1954.¹¹⁰⁶ The PLAN currently includes six nuclear-powered submarines: five *Han*-class attack boats (SSN) and one *Xia*-class nuclear-powered fleet ballistic missile submarine (SSBN). There is also one conventionally-powered SSB, a *Golf II*. The submarine force currently totals approximately fifty-nine operational boats, including the nuclear-powered force, the four *Kilo*-class boats acquired from Russia since 1995, and a mix of *Song* (3), *Ming* (17) and *Romeo* (31) ships, all diesel-electric powered submarines of various vintages.¹¹⁰⁷ The *Song*-class submarine may be the Chinese-built replacement for these boats; the third ship was launched in early 2000. The PLAN will probably have to choose between the *Song* and the *Kilo*-classes because of budgetary limits, or it may opt to purchase the Russian-designed *Amur*-class submarine, which will reportedly be equipped with a air-independent propulsion system.¹¹⁰⁸

The PLAN's submarines are organized into six or seven flotillas. The 2nd, 12th, and 62nd are part of the North Sea Fleet, and include all six nuclear-powered submarines. The 22nd and 42nd flotillas are stationed with the East Sea Fleet, and include China's four *Kilo*-class boats, while the South Sea Fleet deploys the 32nd and possibly a second flotilla. The *Ming*-class submarines are assigned to this fleet.¹¹⁰⁹

¹¹⁰⁵ Such as very small patrol craft and, harbor service craft.

¹¹⁰⁶ Kondapalli, "China's Naval Structure," p. 4.

¹¹⁰⁷ Individual fleet numbers come from *The Military Balance* and Richard Sharpe, ed., *Jane's Fighting Ships, 1999-2000*, Coulsdon, Surrey, UK: Jane's Information Group, 1999, unless otherwise noted. The numbers accuracy is suspect for submarines and small combatants, since as many as half of the stated number of vessels may be held in reserve. Fifty-nine is the number currently used by U.S. Navy analysts.

¹¹⁰⁸ Ibid., p. 117; *Combat Fleets*, p. 107.

¹¹⁰⁹ This information is from a paper on China's submarine force, presented by a very reliable source, at the April 2000 CNA Conference on the PLAN. Richard Sharpe, ed., *Jane's Fighting Ships, 1999-2000* p. 118, states that the *Mings* are split between the North and South Sea Fleets. The uncertainty about the total number of submarine flotillas results from different listings re *Janes Warships*, *Combat Fleets*, the FAS website, Taiwan sources, PLAN sources, and U.S. analysts.

The PLAN's newest indigenously produced surface ship is the *Luhai*-class DDG, the *Shenzhen*.¹¹¹⁰ The first of two *Sovremenny*-class DDGs purchased from Russia, the *Hangzhou*, reached its new homeport of Zhoushan in early 2000, with the second ship of this class is reportedly undergoing sea trials, preparatory to arriving in China late in the year.¹¹¹¹ Other surface forces include one *Luhai*-class and two *Luhu*-class guided missile destroyers and fourteen operational *Luda*-class DDGs, including the three newest models, one *Luda III* and two *Luda IIs*.¹¹¹² Additional large surface combatants include a mix of approximately six *Jiangwei* and twenty-four *Jianghu*-class guided missile frigates.

Smaller craft include several hundred vessels, ranging from modern missile-equipped *Huang*-class patrol boats to small riverine combatants—some of which are assigned to the People's Armed Police (PAP), the Maritime Safety Agency (MSA), the Customs Service, or the maritime militia.

The PLAN amphibious force is capable of embarking perhaps one mechanized infantry division, approximately 12,000 troops and their equipment, for a relatively short voyage.¹¹¹³ It includes thirteen landing-ships-tank (LST), six of them the relatively modern *Yuting*-class and seven the *Yukan*-class. Two additional *Yutings* are currently under construction. There are also approximately forty smaller landing-ships-mechanized (LSM) of various classes and ages, as well as six *Qiongsha*-class troop transports (two of which have been converted to hospital ships).¹¹¹⁴

¹¹¹⁰ A second *Luhai* is listed under construction by Ibid. p. 119; and Philip Young, *Chinese Military Digest* (<http://www.gsprint.com/cmd/cmd.htm>), but according to author's interviews the next DDG, probably under construction in a Dalian shipyard, may be sufficiently different from *Shenzhen* (the first *Luhai*-class ship) as to denote a new ship class.

¹¹¹¹ "China to Receive Second Russian Destroyer in November 2000," *Agentstvo Voyennyykh Novostey*, 10 July 2000, in FBIS-CEP2000710000147.

¹¹¹² *The Military Balance*, p. 178, lists a third *Luhu* under construction, but it seems more likely, given China's propensity to build small ship classes, that construction of the follow-on *Luhai*-class of guided missile destroyer (DDG) has superseded further *Luhu* construction. Taiwan Navy sources show different PLAN strength figures, reflected in Annex B.

¹¹¹³ The key determinant to voyage length for almost all these amphibious ships is fresh water availability onboard.

¹¹¹⁴ This is a "soft" number, subject to many factors, including the amount and type of cargo to be carried by embarked troops, the duration and distance of the embarkation, and other factors. The LSTs and LSMs are designed to land troops during an opposed assault; the troop transports are more likely designed to administratively offload troops, pier-side. Also, during an amphibious assault, some of the LSTs and LSMs would carry predominantly cargo—such as supplies and vehicles—and almost no

Several of the combatants, including the *Luda*-class, have mine laying racks installed, and are required to exercise annually laying mines. The PLAN has just one dedicated minelayer, the *Wolei*, and approximately fifty-eight mine sweeping craft, at least half of them in the reserve force and of questionable operational readiness.¹¹¹⁵

Each fleet's AOR includes naval bases and subordinate naval garrison commands. These are important organizations, with extensive geographic reach: they provide "hotel"¹¹¹⁶ and other logistics services to fleet operating units, including training and education, maintenance, and general administrative support.

Command Relationships. Each fleet commander also serves as deputy commander of the matching MR. A vice admiral commands the North Sea Fleet and serves as a Shenyang MR deputy commander, but his authority during wartime is unclear: would he function as a true, joint deputy commander, or merely be the deputy in charge of naval forces? The fleet commander's relationship with the MR PLAAF commander, also an MR deputy commander, is also unclear.¹¹¹⁷

Command relationships within the MRs during peacetime are complicated by the PLAN and PLAAF commanders' dual chains-of-command: administrative and operational, with the MR commander—invariably a ground forces officer—not in control of both chains. The MR commander's scope of authority may be further complicated by the status of special units, such as quick-reaction forces, which are operationally tasked by the GSD.¹¹¹⁸

troops; others might be loaded only with troops. Furthermore, the condition of many of these vessels is hardly known; many of them may not be seaworthy or marginally so.

¹¹¹⁵ In fact, many types of mines can be laid by aircraft, as well as by almost any fishing boat or merchant ship, but laying a truly useful, navigable minefield requires expertise and exact navigation not normally found on such miscellaneous vessels. The PLAN also has forty-two drone mine-sweeping boats in the reserve. *Combat Fleets*, pp. 119-120, reports many of China's dedicated MIW ships are equipped to sweep only moored contact mines.

¹¹¹⁶ "Hotel" services include, literally, food and housing, but also denote maintenance and operation of all shore-side facilities for supporting operating units, to include such things as piers, dry docks, classrooms.

¹¹¹⁷ One senior PLA officer told the author that in time of war, the PLAN commander would be the MR deputy commander senior to the PLAAF commander; the same PLA officer told another U.S. interlocutor that the two would be equal in status as MR deputy commanders.

As pointed out by Dennis Blasko, "A New PLA Force Structure," p. 284, "A true indicator of the PLA's commitment to joint operations would be for the commander of the Eastern or Southern Theaters to be a naval officer...."

¹¹¹⁸ Nan Li, "The PLA's Evolving Campaign Doctrine and Strategies," in Mulvenon and Yang, p. 154ff.

Command relationships are theoretically clarified during wartime, when one or more MRs form a "Front," as during the 1979 Vietnam incursion.¹¹¹⁹ The Front is augmented by officers from Beijing headquarters staffs. These officers are empowered to relax or sustain constraints on the Front commander's freedom of action: in the 1979 case, these issues included how far he could move forces into Vietnam and to what degree "hot pursuit" was authorized.¹¹²⁰

North Sea Fleet. The North Sea Fleet is headquartered at Qingdao, on the southern coast of the Shandong Peninsula, with other major bases at Lushun and Xiaopingdao. Smaller facilities are located at Huludao (including nuclear submarine construction and support), Weihai, Qingshan, Lianyungang, Lingshanwei, Dahushan, Changshanqundao, Liushuang, Yushan, Dayuanjiadun, and Jianggezhuang, the last serving as the fleet's submarine homeport. Important shipbuilding facilities are located at Dalian. PLANAF facilities are located at Liangxiang, Luda, Qingdao, Jinxi, Jiyuan, Laiyang, Jiaoxian, Xingtai, Laishan, Anyang, Changzhi, and Shanhaiguan.¹¹²¹

The fleet's AOR extends from the Korean border (marked by the Yalu River) to approximately 35°10'N latitude. This area corresponds roughly to the Shenyang, Beijing, and Jinan Military Regions (MR) or, described another way, includes the Bohai (Bo Sea) and northern half of the Huanghai (Yellow Sea). The AOR's coastline is divided into nine Coastal Defense Zones. The North Sea Fleet's forces include three submarine, three surface combatant, one amphibious, and one MIW squadrons, as well as the Bohai Sea Training Flotilla and hundreds of small patrol and auxiliary craft.

As is the case with all three fleets, the North Sea Fleet's command structure closely resembles PLAN Headquarters in Beijing (see Figure 10.7). Each fleet includes Training (and an associated Training Center), Logistics/Supply, Repair, Political, and Air Departments, and Surface Combatant and Submarine Flotillas. The fleets also have flotillas of small harbor, auxiliary, and patrol craft assigned to their various naval base commanders.

The fleet's political commissar is a rear admiral, as are the three deputy commanders and three deputy political commissars. The fleet aviation commander is also a rear admiral. The fleet's Lushun and Qingdao Naval Bases are commanded by rear admirals, while the garrison commands at Dalian, Weihai, and Liugondao are commanded by senior captains.

¹¹¹⁹ Harlan Jencks, "China's 'Punitive' War on Vietnam: A Military Assessment," *Asian Survey*, vol. XIX, August 1979, pp. 805-6, describes the 1979 formation of the PLA's "Southern Front" by the Kunming and Guangzhou MRs and the "Northern Front" by the Xinjiang, Lanzhou, Beijing, and Shenyang MRs during the war with Vietnam.

¹¹²⁰ I am indebted to Paul H.B. Godwin for this explanation.

¹¹²¹ Lists of bases for the three fleets comes from *Combat Fleets*, p. 103, which differs somewhat from similar lists provided in Richard Sharpe, ed. *Jane's Fighting Ships, 1999-2000*; and Srikanth Kandopalli, "China's Naval Structure and Dynamics."

East Sea Fleet. The East Sea Fleet is headquartered at Ningbo, with other major bases at Shanghai, Fujian, and Zhoushan (where the newly acquired *Sovremennys* are homeported). Smaller facilities are located at Chenjiagang, Dinghai, Wusong, Xinxiang, Wenzhou, Sanduao, Xiamen, Quandao, and Xiangshan (submarines, including all four *Kilo*-class, are homeported at the last).¹¹²² Important shipbuilding facilities are located at Shanghai (for surface ships) and inland on the Yangzi River at Wuhan (for submarines). PLANAF facilities are located at Ningbo, Shanghai, Luqiao, Shitangqiao, Danyang, and Daishan.¹¹²³

The fleet's AOR reaches from approximately 35°-10'N down to 23°-30'N latitude, corresponding roughly to the Nanjing MR, or to the littoral areas of the southern half of the Yellow Sea, all of the East China Sea, and the Taiwan Strait. Its coastline is divided into seven Coastal Defense Zones. Assigned units include two submarine, two surface combatant, one amphibious, and one MIW squadrons, as well as over two hundred small patrol and auxiliary craft, including those that patrol the Yangzi and other riverine waters.

The East Sea Fleet is commanded by a vice admiral who also serves as a Nanjing MR deputy-commander; its political commissar is also a vice admiral (see Figure 10.8). The three deputy fleet commanders are rear admirals, as are the three deputy political commissars and the fleet aviation commander. Base commanders for Fujian, Shanghai, and Zhoushan are rear admirals, while the Xiamen Naval Garrison is commanded by a senior captain.

South Sea Fleet. The South Sea Fleet is headquartered at Zhanjiang, with other major bases at Yulin and Guangzhou. Lesser facilities are located at Hong Kong, Haikou, Shantou, Humen, Kuanchuang, Tsun, Mawai, Beihai, Pingtan, Sanzhou, Tang Chian Huan, Longmen, Bailong, Donguon, Baimajing, and Xiachuandao. PLANAF facilities are located at Lingshui, Foluo, Haikou, Sanya, Guiping, Jialaishi, and Lingling. The fleet's AOR stretches from approximately 23°-30'N to the Vietnamese border, equating to the Guangzhou MR, or the littoral areas of the South China Sea and the Beibu Gulf. Its coastline is divided into nine Coastal Defense Zones.

The fleet's most important operational responsibility is the South China Sea, with significant support facilities on Woody Island and on Fiery Cross, Lincoln, and Duncan Reefs.¹¹²⁴ The fleet's responsibility for the contested Paracel and Spratly Islands, and Macclesfield Bank, explains the presence at Hainan's Lingshui airfield of the PLANAF's

¹¹²² Author's discussion with U.S. analysts. *Jane's Fighting Ships, 1999-2000*, p. 117; *Combat Fleets*, pp. 107-8, gives Ningbo as the *Kilos*' homeport.

¹¹²³ Base locations and size are reported in *The Military Balance, 1999-2000* and in Kondapalli. These sources agree more than they disagree.

¹¹²⁴ Author's interviews with USCINCPAC personnel and with Dr. Mark Valencia, East-West Center, Honolulu, 1-5 November 1999.

long-range B-6 *Badger* aircraft. The base on Woody Island in the Paracels is the only South China Sea facility capable of supporting tactical aircraft.¹¹²⁵

The South Sea Fleet is home to the PLAN's newest indigenously produced surface combatant, the *Luhai*-class guided missile destroyer. It also includes one or two submarine, two surface combatant, one amphibious, and one MIW squadrons, as well as perhaps 300 patrol and auxiliary craft, including those based at Hong Kong and on the MR's rivers. Additionally, the fleet includes one of China's three major replenishment-at-sea ships, the *Nanchang*. The South Sea Fleet—significantly, not the East Sea Fleet facing Taiwan—also deploys the majority of China's newer amphibious ships, including all four *Qiongsha*-class troop transports, both hospital ships, ten of the fifteen *Yuting* and *Yukan*-class LSTs, and all four of the *Yudao*-class LSMs.¹¹²⁶

China's Marine Corps is headquartered in Beijing and reports to the PLAN commander, but the Marines are all stationed in the South Sea Fleet's AOR with a direct operational chain-of-command to the fleet commander. The corps is composed of two multi-arm brigades of approximately 6,000 personnel each, organized into 750-man battalions. This force includes infantry, artillery, armor, engineer, communications, anti-chemical, anti-armor, and amphibious scout personnel.¹¹²⁷

The corps' primary mission is amphibious warfare; the South China Sea is its anticipated operating theater and the marines man the island outposts of that sea. The Marine Corps resembles the PLANAF in having a dual chain-of-command: while it reports operationally through the South Sea Fleet commander, the corps is administratively responsible to PLAN headquarters in Beijing for training, equipment, strategic planning, personnel, and policy. The corps' commander is relatively junior, probably a senior captain. He apparently does not have a position on the MR commander's staff, although he may be tasked by that officer as part of a joint PLA exercise. Furthermore, in wartime the Marine Corps, as a rapid reaction force, would likely be tasked directly by the GSD.¹¹²⁸

¹¹²⁵ Woody Island may be capable of supporting 2-3 fighter aircraft in hangars plus approximately 30 on hard stands, in the open. The island does not, however, offer a significant maintenance or fresh-water washdown capability, although additional fresh water tanks have been constructed. It also does not appear to have the ground control radar capability usually required by Chinese tactical aviators.

¹¹²⁶ *Jane's Fighting Ships* for the past decade show this amphibious concentration in the South Sea Fleet. Two of the *Qiongsha*-class have been converted to hospital ships; only one of the troop transports may be operationally active.

¹¹²⁷ *Xinhua*, 1 October 1999, in FBIS-CHI-99-0930; author's interview with PLA personnel and U.S. analysts.

¹¹²⁸ This is not dissimilar to the status of the U.S. Marine Corps fleet units. For instance, the general in command of the Fleet Marine Force Pacific, located in Hawaii, is operationally responsible to the Commander-in-Chief U.S. Pacific Fleet, but administratively has a direct chain-of-command (as Commander Fleet Marine Corps

The vice admiral commanding the South Sea Fleet serves as a Guangzhou MR deputy commander; another vice admiral is the fleet political commissar (see Figure 10.9). The three deputy commanders are rear admirals, as are the three deputy political commissars. The fleet's PLANAF forces are commanded by a rear admiral; the Marine Corps brigades by senior captains. The fleet's three naval bases at Yulin, Guangzhou and Zhangjiang are commanded by rear admirals. The naval garrisons at Shantou and Xisha are commanded by senior captains.

PLANAF Operations

One important but obscure relationship is that between PLANAF and PLAAF components. Does the PLAAF assume operational control of PLANAF units in time of war, for instance, to increase the efficiency of coastal air defense? Are PLANAF units wholly responsible for the defense of naval bases and other facilities, or can they call on PLAAF assistance? Or are the two air components in the midst of the same command and control imbroglio that has dogged the American military for so many years? The preliminary, general response to these questions is that although over-water flights have now become routine for the PLAAF, there are still very limited joint flight operations occurring between the two "air forces."

One of the factors in this situation is the organization of China's coastal air defenses, including the way responsibility for continental air defense is assigned by the CMC. Ideally, the coastline would be divided into air defense sectors commanded by a joint commander with authority to call upon both PLAAF and PLANAF resources, but this does not appear to be the case.

From north to south along China's coast, air defense is assigned by the proximity of airfields, rather than by service. The North Sea Fleet's PLANAF contingent has the responsibility from its northern border down to about the Shandong Peninsula; the PLAAF then assumes air defense responsibility to a point south of Shanghai, although that city is located in the heart of the PLAN's East Sea Fleet AOR. The PLANAF resumes air defense responsibility for a brief stretch south of Shanghai, but the PLAAF then has the mission for most of Fujian Province's coastline, which places it on the front line against Taiwan. The PLANAF resumes air defense for most of the South Sea Fleet AOR, including the South China Sea.¹¹²⁹

This system, based on geographical sectors rather than service capability or doctrine, indicates that not only are joint maritime flight operations not routinely

Bases Pacific) to the Commandant of the Marine Corps, in Washington, D.C. This enables the general in Hawaii, when he does not agree with a directive from his operational commander, to "put on his other hat" and ask for a different decision from his administrative commander in Washington.

David Finkelstein described to me the 1999 regulations which assigned the GSD responsibility for PLA-wide training and for issuing operational tasking to all rapid reaction forces.

¹¹²⁹ I am indebted to Allen for describing this system of air defense to me.

employed, but joint doctrine for such operations has not been systemically developed by the two "air forces." Indeed, PLAAF operations over water likely concentrate on classic air intercept and pursuit operations, while PLANAF operational doctrine concentrates on fleet support missions, such as surveillance and ASW. Nevertheless, U.S. military surveillance aircraft operating off the coast in the East Sea Fleet's AOR are often intercepted by PLANAF F-7 fighters.¹¹³⁰

Coast Guard

China does not have a formally organized coast guard, but the functions normally assigned to that service—maritime safety, customs enforcement, environmental protection and the like—are the responsibility of several organizations. China organized a maritime militia in the early 1950s as part of the effort to defend its fishing fleet and coastal trade against depredations by KMT naval forces. This force consisted largely of fishing trawlers armed with machine guns and hand-held weapons. They were controlled by local CCP branches, and when on a mission carried party representatives.¹¹³¹ In 1955, Beijing organized Public Security Force sea units; they were responsible for guarding ports, rivers, and the fishing fleets. Ironically, these duties often took them further to sea than the PLAN. Naval district defense units were also organized, and tasked with cooperating with the army for inshore coastal defense.¹¹³²

There is a gap in our knowledge about the development of these forces. China currently deploys several maritime auxiliary forces, all of them semi-military to a degree. These include the Customs Service, the State Oceanographic Bureau, the Public Security Bureau's Maritime Section, the Border Security Force's Maritime Command, the Ministry of Public Security's Frontier Guard Detachment, the MSA, and a maritime militia. The Customs Service may be the most professional of these organizations, although all use a collection of more than 200 patrol craft of various classes, many of them sea-going.¹¹³³

¹¹³⁰ Author's not for attribution conversations with senior PLAN officers.

¹¹³¹ John Moore, ed., *Jane's Fighting Ships, 1980-81*, London: Jane's Publishing Co., 1980, p. 109.

¹¹³² Swanson, p. 204, points out these forces' similarities to imperial predecessors.

¹¹³³ *Jane's Fighting Ships, 1999-2000*, pp. 144-6. See "State to Set Up 200,000-Strong Maritime Cruise Unit," *Xinhua*, 6 December 1996, in FBIS-CHI-96-236, for a report of a 200,000-man "maritime cruise unit" established in 1996, to be manned by reservists and to assume coastal defense duties. A more recent report is "Linhai City of Zhejiang Sets up Sea-Borne Militia Unit to Ensure Boats for Civilian use Will be Able to Come at the First Call," *Zhongguo tongxun she*, 6 May 2000, in FBIS-CPP20000506000062, reporting that the "province's first armed forces department of the aquatic product oceanic administration and a sea-borne militia unit was set up." The "aquatic product oceanic administration" is not further identified, but presumably is a translation of the Maritime Safety Administration.

The State Oceanographic Bureau is responsible for research and environmental protection, including enforcement of the "Marine Environmental Protection Law of the PRC," passed in December 1999.¹¹³⁴ This law assigns responsibilities to several organizations, although they have additional duties, as well:

- (1) *State Environmental Protection Administration*: a consolidated supervisory and managerial department for national environmental protection work;
- (2) *State Marine Administration*: supervision and management of the marine environment and organization of investigations, monitoring, lookout, evaluation, and scientific research of the marine environment;
- (3) *State Maritime Affairs Administration*: supervision and management of non-fishing and non-military shipping pollution of the marine environment;
- (4) *State Fishery Administration*: supervision and management of pollution to the marine environment by non-military ships inside fishing port waters and fishing boats outside fishing port waters; and
- (5) *Military Environmental Protection Department*: supervision and management of pollution to the marine environment by military ships and boats.¹¹³⁵

Other craft are in the Coastal Regional Defense Forces, comprising 25,000 personnel. This force is probably part of the Naval Coastal Defense System, which includes a system of Coastal Observation Posts spread along China's coastline, coastal

Also see *Xinhua*, 18 June 1999, in FBIS-CHI-1999-0618, for a report that Shanghai had established a "Maritime Safety Administration, the first of its kind in China's coastal areas,...to supervise the management of navigation marks, the surveying of sea-routes, and the inspection of ships and maritime facilities."

¹¹³⁴ Tang Min, "PRC Marine Environmental Protection Law Praised," *China Daily*, 3 April 2000, in FBIS-CPP20000403000020, reports that the "amended Marine Environmental protection Law" came into effect on 1 April 2000.

The complexity of coast guard-type responsibilities in China is obvious, and shown in "State Council Forms Marine Bureau in Shenzhen," *Xinhua*, 27 December 1999, in FBIS-FTS19991227000826, which reports that the "Shenzhen Marine Bureau was formed [to carry out] marine supervision. It combined the previous "separate port supervision departments under the Shenzhen Government and the Ministry of Communications." The new bureau is responsible for "managing overseas ships sailing and anchoring in Shenzhen water space, abiding by the related international marine treaty, maintaining order in sea navigation and transportation, supervising ships anti-pollution facility, handling water pollution, maintaining public navigation facilities and regulating the shipping economy." No reference is made to the other organizations which seem to have similar responsibilities.

¹¹³⁵ Text of "Marine Environmental Protection Law of the PRC," *Xinhua*, 26 December 2000, in FBIS-FTS20000207000268.

cruise missile and artillery sites, coastal patrol boat squadrons, and a network of coastal radar and communications stations.¹¹³⁶

The recently established Maritime Safety Administration operates under the Communications Ministry in Beijing. Fourteen of a planned twenty offices had been set up by the end of 1999. The MSA is reportedly charged with supervising the "management of navigation marks, the surveying of sea-routes, and the inspection of ships and maritime facilities," with a special focus on shipboard safety.¹¹³⁷ Its ship salvage responsibilities are carried out through the semi-private China Salvage Company, which also provides afloat and air SAR assistance.¹¹³⁸

Finally, the Frontier Guard Department is "in charge of administering social order of vessels along the coasts." Rumors have surfaced that some of these vessels have been involved in piracy and other illegal acts in China's coastal waters, perhaps evidenced in guidance to this force to "strictly abide by law-enforcement procedures [and not] to levy fines which are beyond their authority, or which are too excessive."¹¹³⁹

DOCTRINE AND ORGANIZATION

Doctrine is defined in the United States as "fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives

¹¹³⁶ *Xinhua*, 26 March 1999, in FBIS-CHI-99-0327, reported that "a three-dimensional border and coastal defense communications network...has been completed and become operational": *Xinhua*, 22 November 1999, in FBIS-CHI-99-0647, discusses the command and control structure for at least part of this coastal defense system.

¹¹³⁷ "PRC Establishes 12 State Maritime Safety Administrations," *Xinhua*, 28 December 1999, in FBIS-CPP19991228001478; *Xinhua*, 18 June 1999, in FBIS-CHI-99-0618, claimed that in 1999 the MSA dealt with 1,880 safety violations and "saved the lives of nearly 2,500 people" in marine waters and on the Yangzi River. The drive to improve maritime safety, following the disastrous passenger ferry sinking in late 1999, was also indicated in "China Takes Steps to Ensure Navigation Safety," *Xinhua*, 21 February 2000, in FBIS-CPP20000221000132. Also see Guo Aibing, "Chinese Transportation Officials Urge Sea Safety Measures," *China Daily*, 28 January 2000, in FBIS-FTS20000128000198, for the report that in 1999 "769 passengers died in ship or boat accidents—a 26.9 percent increase over 1998," as the result of 249 boats sunk at a cost of more than \$30 million. The MSA predecessor, the "Bureau of Harbor Superintendency," was responsible for anti-pollution and SAR efforts, including the SAR Coordination Centers..

¹¹³⁸ Author's discussion with Mr. Gerard Yoest, U.S. Coast Guard Director of International Relations, May 2000.

¹¹³⁹ "PRC Will Enforce Rules on Coastal Vessels 1 May," *Xinhua*, 29 May 2000, in FBIS-CPP20000329000034.

[and which] is authoritative but requires judgement in application."¹¹⁴⁰ It provides the crucial link between strategic intent and operational effectiveness.

Maritime warfare is by nature multidimensional, a characteristic becoming steadily more complex as information-age developments are adapted for naval use. PLAN organization still conforms, however, to classic naval force structure--surface, sub-surface, and air components operating almost entirely along traditional "vertical" administrative and operational chains of command.

Effective doctrine should also reflect and affect organization. The PLAN's current fleet and shore establishment organization, for instance, does not appear to reflect a significant attempt to conform to developments in modern warfare commonly attributed to "information warfare" or the "revolution in military affairs". The experimental work possibly underway in the Naval Research Center, the Naval Research Institute, or the Nanjing Command Academy's experimental cell located with the East Sea Fleet may lead to such changes.

CONCLUSION

The PLAN today is logically organized, with an emphasis on maintaining and improving its operational forces. Its basic organization is a mixture of geographic and mission-oriented commands typical of large navies. The three operational fleets are organized geographically, but are also oriented toward historic and potential threats. All operate in the shadow of U.S. naval and air power.

The North Sea Fleet faces a complex theater involving Russia, Korea, and Japan. The East Sea Fleet's AOR centers on Taiwan, but also includes the Senkaku (Daoyu) Islands. This fleet presumably is tasked with primary planning and execution responsibility for naval action against Taiwan. The fleet itself possesses inadequate assets to execute any significant action against Taiwan, but under a wartime "front" command would probably be empowered to take operational control of aircraft, surface and subsurface ships, and other resources from its sister fleets.¹¹⁴¹ The South Sea Fleet

¹¹⁴⁰ *The Joint Staff Officer's Guide*, AFSC Pub 1, Washington, D.C.: NDU Press, 1997, pp. 0-16.

¹¹⁴¹ Naval headquarters in Beijing, not to mention the CMC, would of course play a very close supervisory/command role in any such military operations against Taiwan. It is also possible that in the event of such a very major military engagement, one of the other fleets, most likely the North Sea Fleet, would simply be combined with the East Sea Fleet. See Blasko, "A New PLA Organization," p. 286, for this thought.

Moreover, the distances between adjacent PLAN fleets are quite short, generally just one to three days of steaming at moderate speeds, unlike the situation with the U.S. or Russian navies, where the distances between the ports and operating areas of the major fleets are generally measured in thousands of miles and weeks of cruising time. There are no significant geographic obstacles to quick or frequent PLAN inter-fleet transfers, although the presence of foreign naval bases throughout East Asia, from Petropavlosk in Russia to Phattaya Beach in Thailand, certainly may constrain such

also faces a complex operational situation, with its AOR including the South China Sea's operational and political problems, as well as unanswered questions about the long-term value to China of possible seabed resources in the area.

The PLAN's Beijing organization is unremarkable, reflecting the usual requirements for administering a large maritime force. It is marked, however, by the ideological coloration of the political commissar system.

The PLAN commander holds the same substantive rank or is senior to his organizational contemporaries, the PLAAF and MR commanders. Shi's June 2000 promotion to full admiral might indicate greater recognition of the PLAN's increased importance by Beijing; more likely, it merely recognizes his successful career and longevity in service. Shi Yunsheng appears to be exercising effective command of the PLAN and obtaining a disproportionate share of the PLA budget for the navy, while focusing his emphasis on improving education and training, maintenance and fleet support, and the force's ability to attain its strategic objectives.

The navy's organization is determined to a significant extent by the ships and aircraft it operates. The goal is maximum effectiveness of these units, modified by geography, perceived threats, and the international and domestic political considerations. PLAN organization will change, furthermore, as the navy grows and modernizes--as new ships and aircraft are deployed.

Historically, China's navy has been organized into geographically discrete operational fleets, as it is today. PLAN organization has evolved undramatically since its founding fifty years ago, when it was formed as an East China force in reaction to the Kuomintang threat from the sea.

The relative strengths of the North, East, and South Sea fleets has not varied startlingly over time, but changes are discernable during various periods when Beijing identified national security concerns with the United States, the Soviet Union, Taiwan, or the South China Sea. Future concerns with India or with stronger Southeast Asian naval forces would likely result in a similar shift in emphasis, with the South Sea Fleet receiving more modernized ships and aircraft, and expanded shore facilities. The extent of such a shift, however, would depend on the criticality of concern for Taiwan and possible intervention by U.S. naval and air forces.

PLAN fleet organization is marked by some interesting factors. First, the different fleets have also been assigned responsibility for specific platforms, such as submarines or amphibious ships, probably for reasons of assigned missions or for ease of maintenance and operation. Second, concentrating all ships of a class in the same fleet simplifies maintenance, training, and support in general of that class, but has the potential to reduce those ships' utility if they have to be assigned to a different fleet. "Type commanders" are apparently not utilized: this system assigns to a rear or vice admiral responsibility for

operations. Still, the primary obstacles to PLAN inter-fleet operations are probably lack of common operational doctrine and non-standard procedures and tactics, along with lack of practice in working together, but western analysts have yet to explore this area.

maintaining and training all the ships in a specific type--destroyers, submarines, amphibious ships, and so on.

Third, as previously noted, the issue of fleet interoperability—the degree of standardization of administrative and operational procedures, communications, tactics, etc.--is not clear. Fourth, the relationships among CMC, PLAN headquarters, MR, and fleet headquarters are often unclear. Fifth, the operating fleets' role in doctrinal development is not clearly understood.

Currently, the East and South Sea Fleets appear to be receiving the bulk of new PLAN ships and aircraft, although accurate counting is difficult. This would be a logical development, given the strategic priority of the Taiwan and South China Sea issues. That said, the presence of the very strong, modern Japanese and South Korean navies means that China will be cautious about diverting too much strength from the North Sea Fleet. In the near-term, the three fleets should remain balanced, with each deploying the surface, submarine, and aviation assets required to accomplish its tasking. Competition for resources among the fleets and, within the fleets among the surface, submarine, and aviation branches will also continue.

Mao Zedong apparently recognized that organizing a navy to extend Beijing's rule to Taiwan required a national effort, to include concentration on amphibious warfare, seaborne logistics, and maritime air power. His campaign to organize such a navy was aborted because of the Korean War and thereafter limited by domestic political events and the international threats China faced. Current evidence suggests that Beijing is still not striving to organize a PLAN capable of more than a defensive effort within about 400 nm of China's coast.

APPENDICES A-I
PLAN Personnel (as of 1 July 2000)

Figure 10.1 PLAN Headquarters

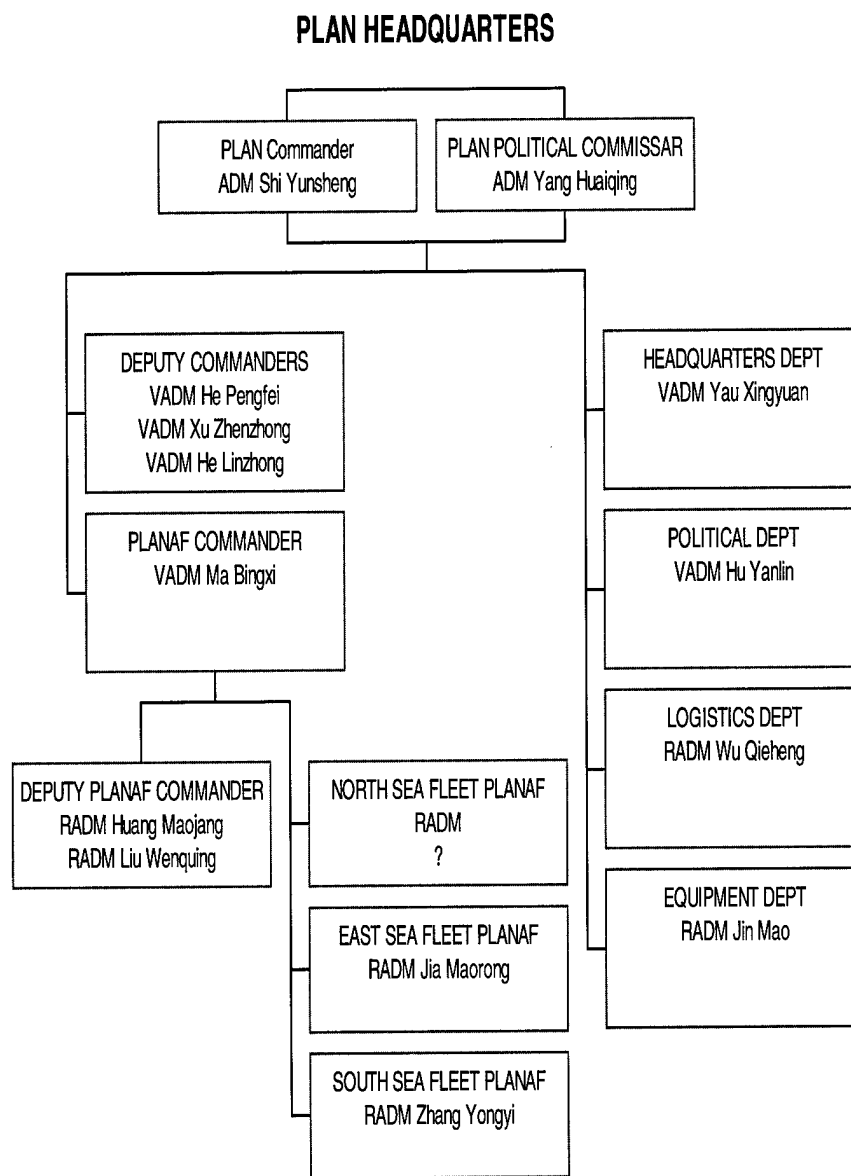


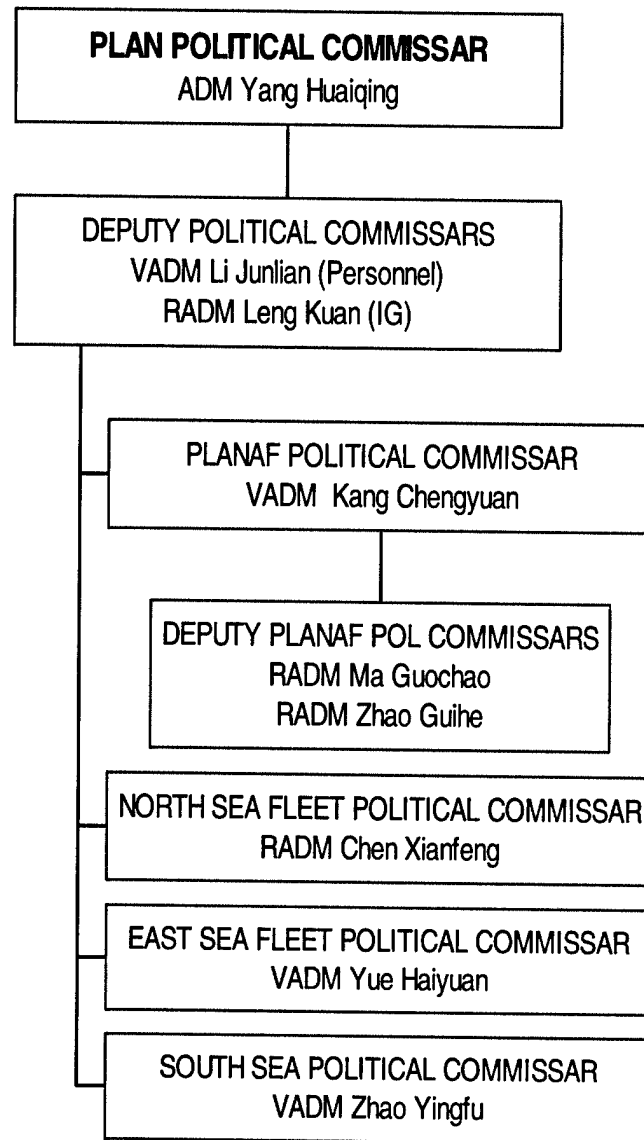
Figure 10.2 PLAN Political Commissar Leadership

Figure 10.3 PLAN Headquarters Department

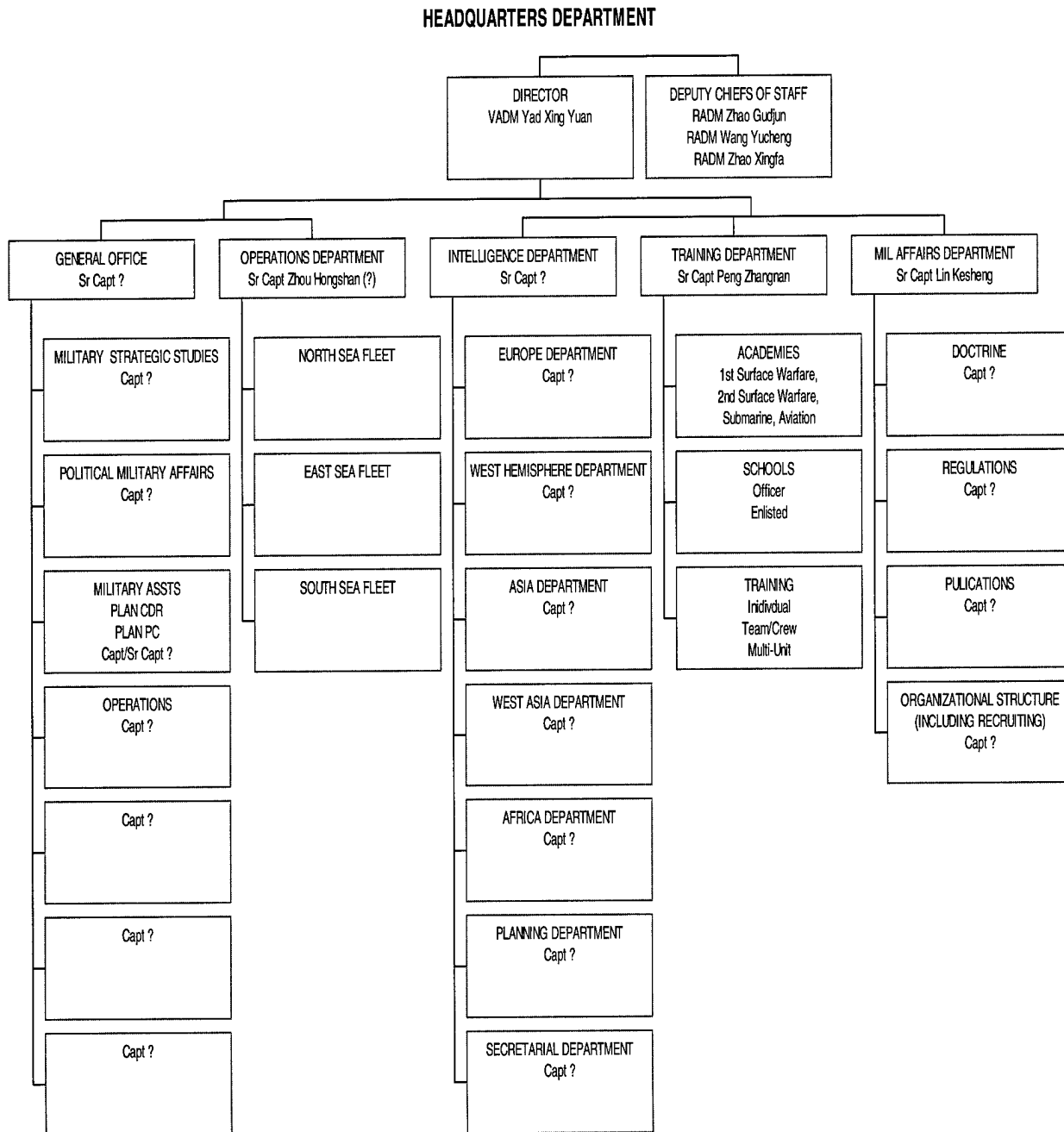


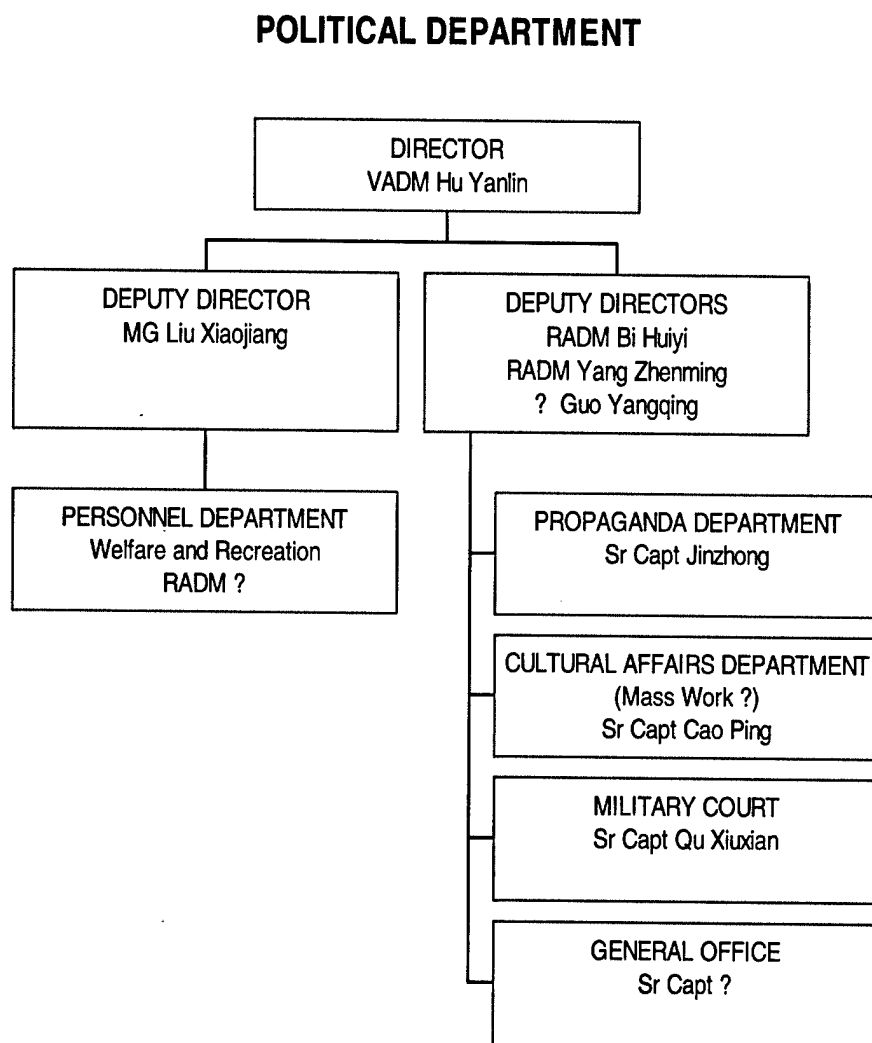
Figure 10.4 PLAN Political Department

Figure 10.5 PLAN Logistics Department

LOGISTICS DEPARTMENT

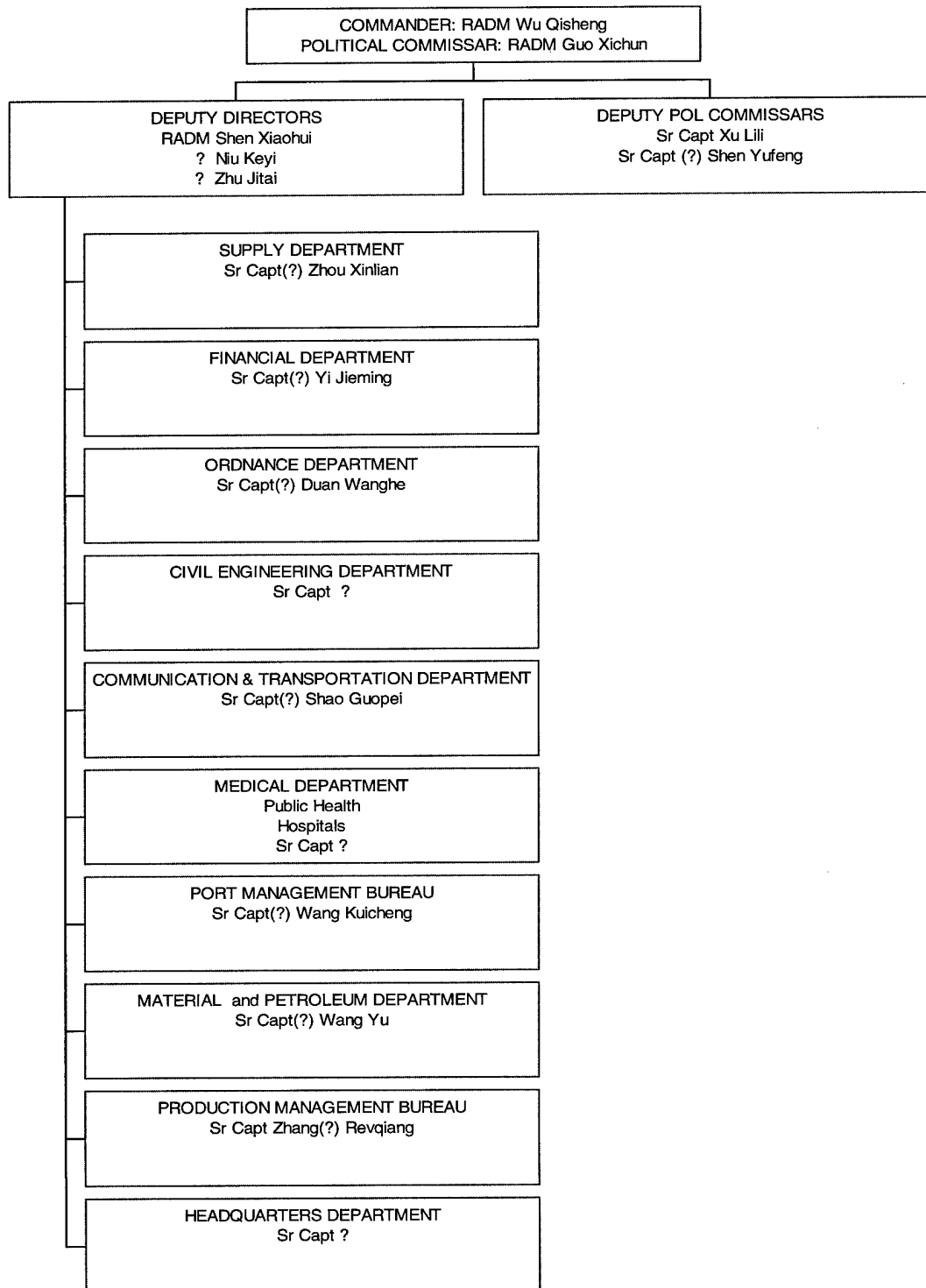


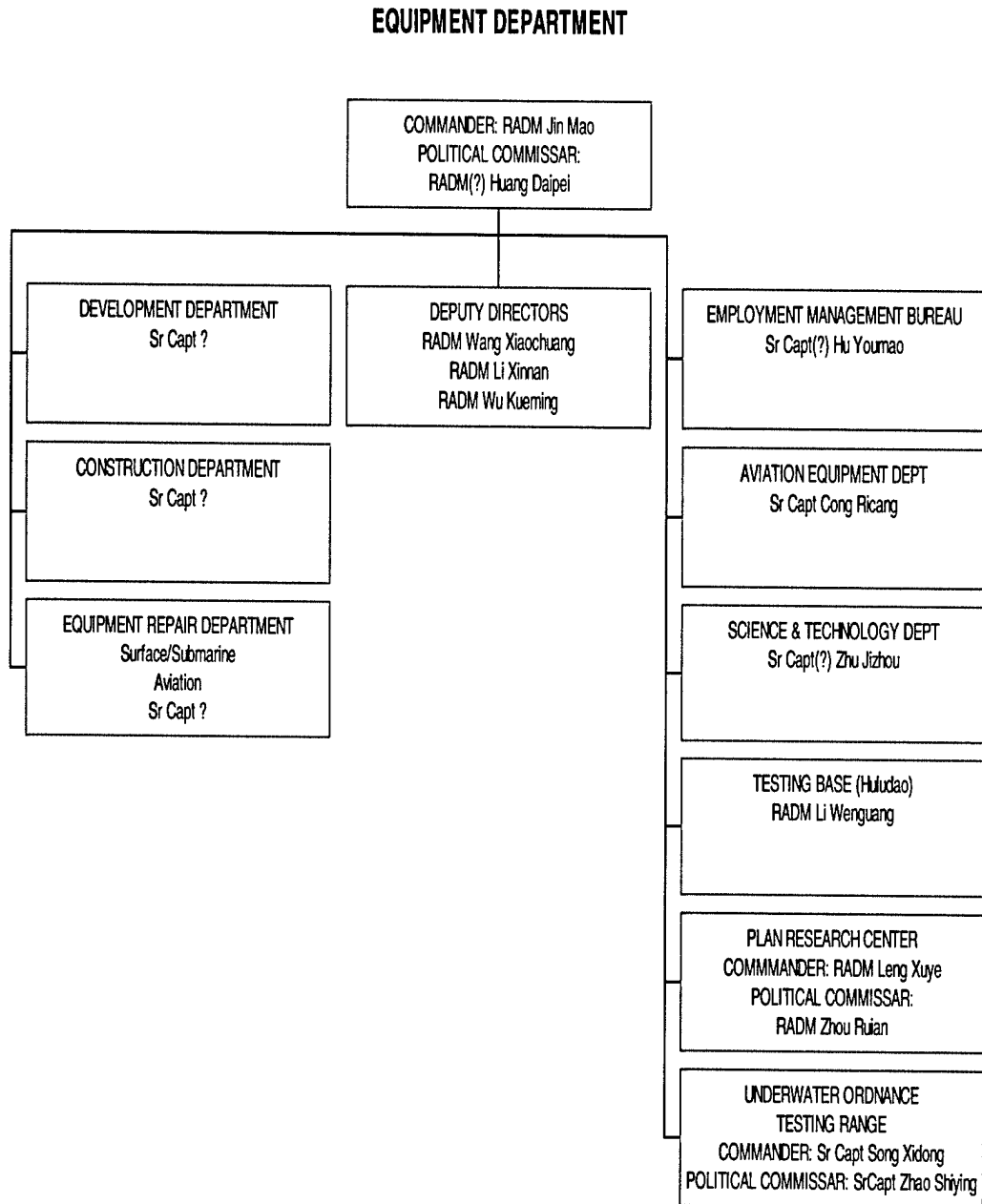
Figure 10.6 PLAN Equipment Department

Figure 10.7 North Sea Fleet

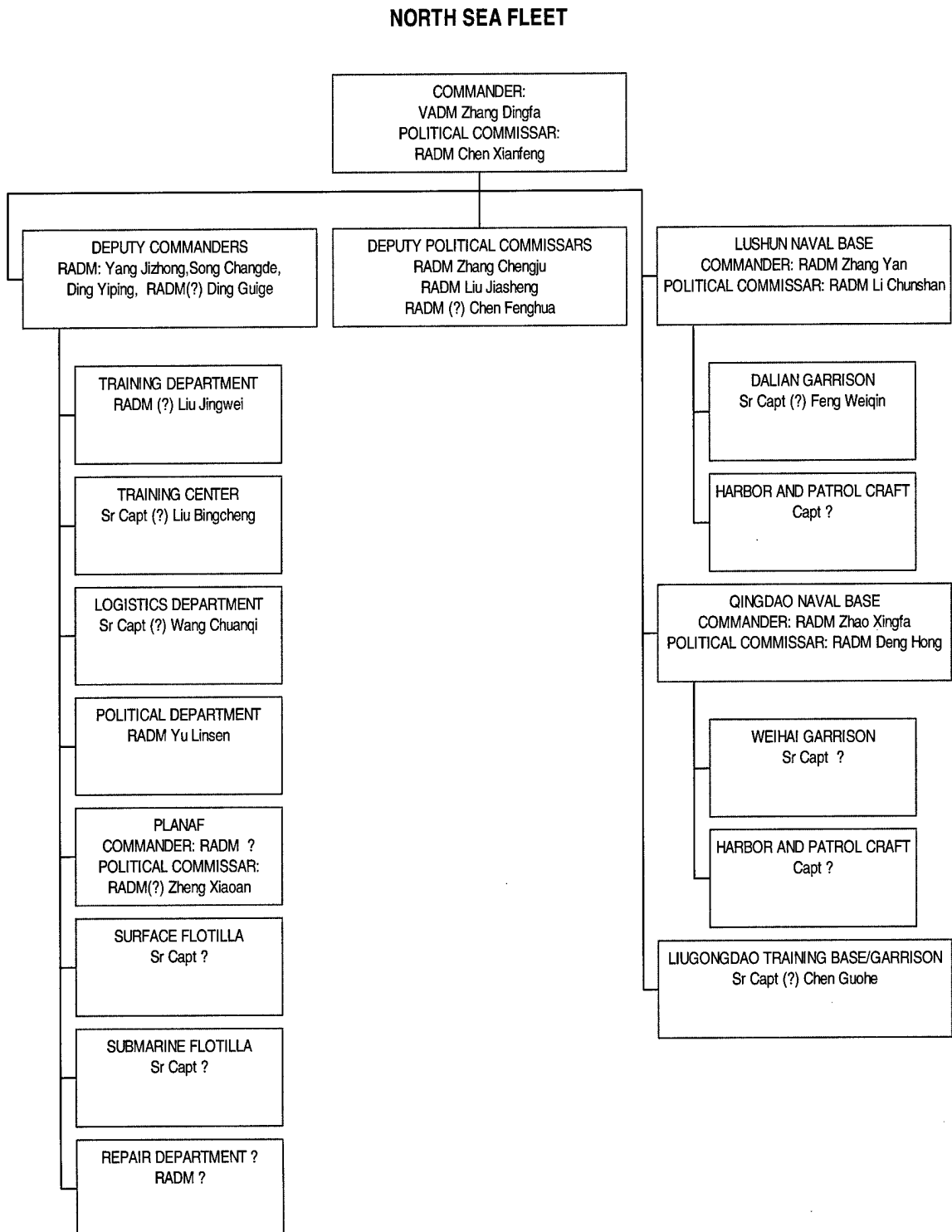


Figure 10.8 East Sea Fleet

EAST SEA FLEET

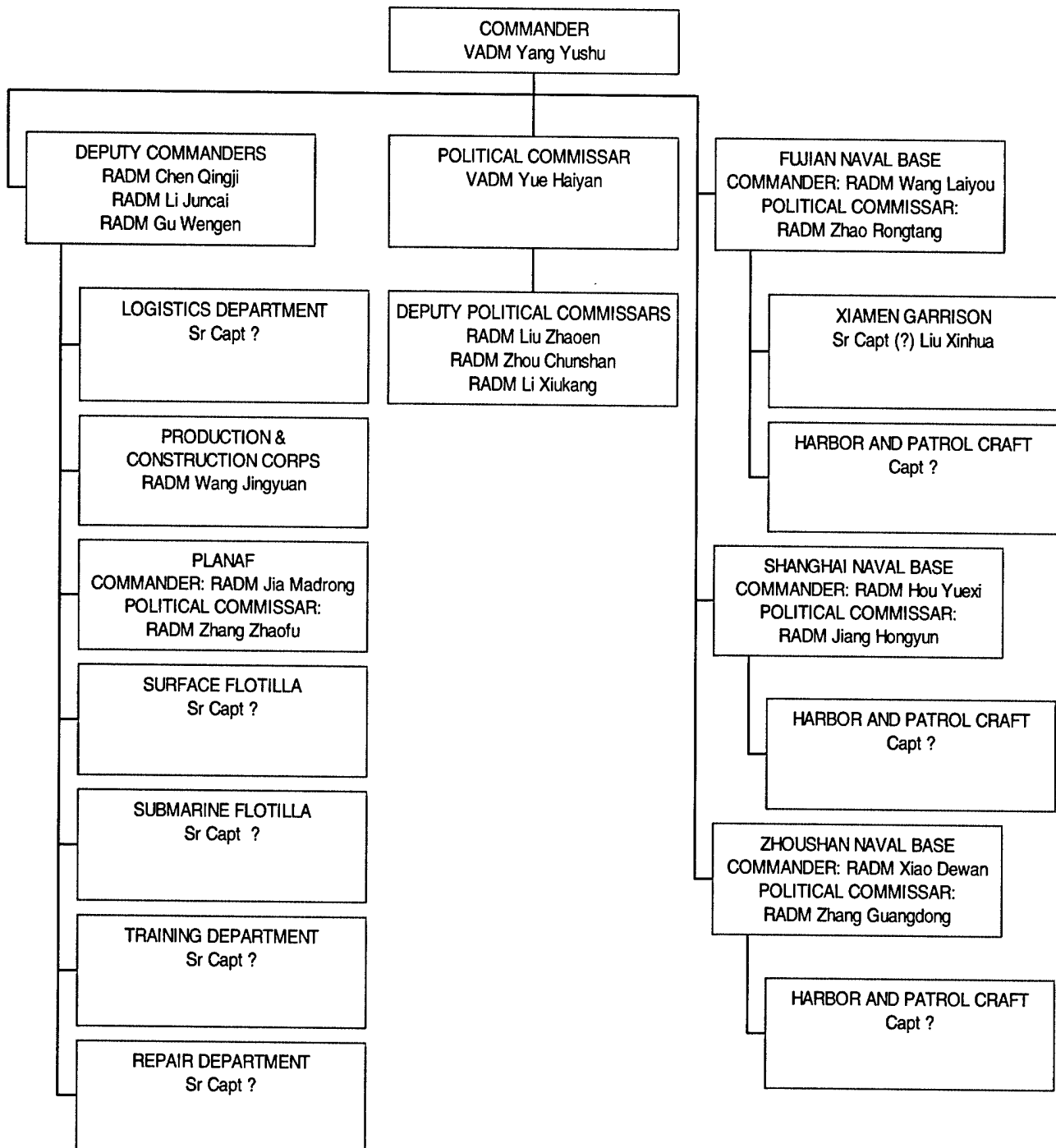
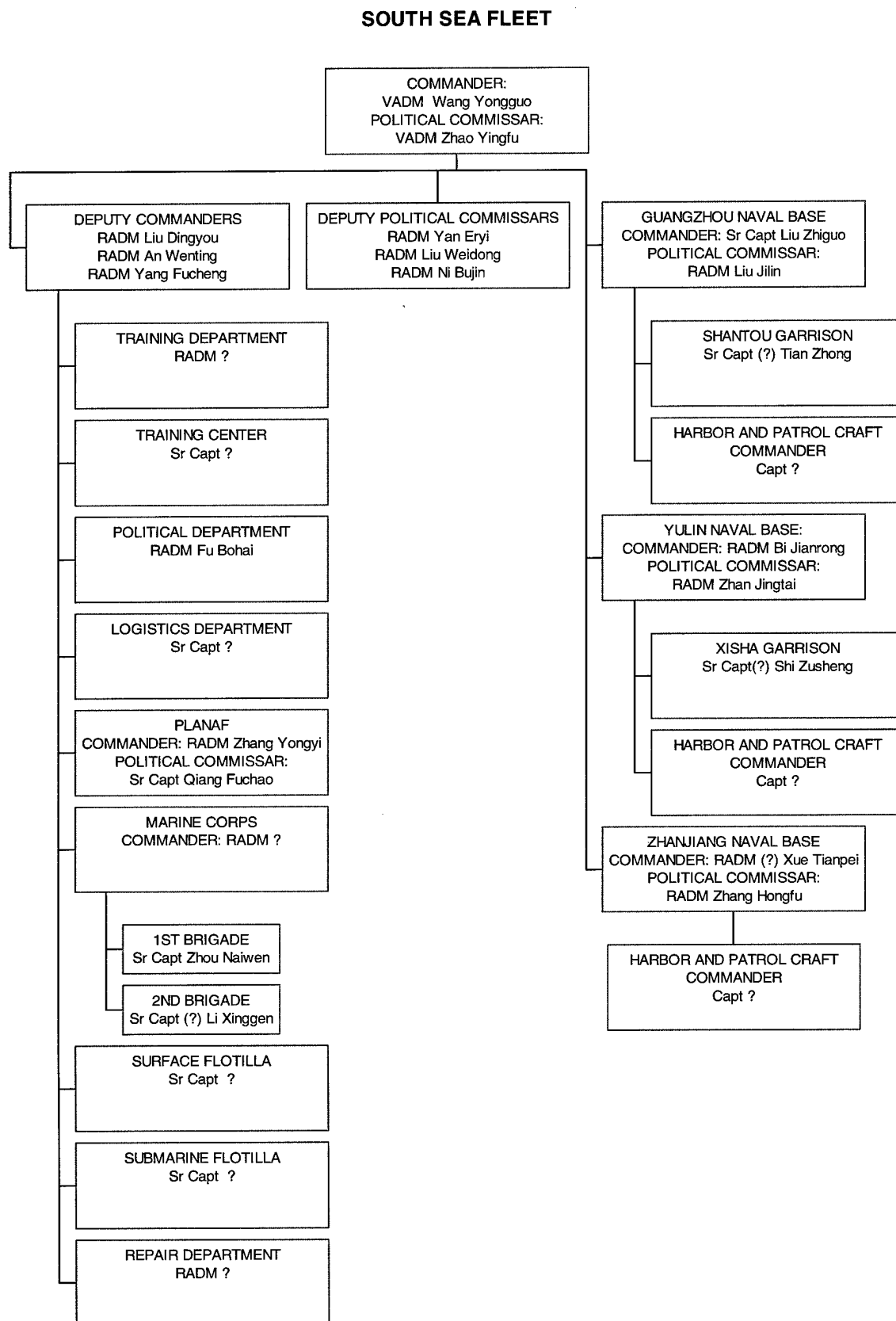


Figure 10.9 South Sea Fleet



11. THE CHINESE SECOND ARTILLERY CORPS: TRANSITION TO CREDIBLE DETERRENCE

By Bates Gill, James Mulvenon, and Mark Stokes¹¹⁴²

INTRODUCTION

The concepts, history, organization, force structure, and posture of China's Strategic Rocket Forces (also known as the "Second Artillery" from the Chinese *Dierpaobing*) remain some of the most heavily shrouded and poorly understood aspects of the Chinese military. Yet, as China undergoes a continued qualitative and quantitative modernization of its nuclear and conventional missile forces, to include improved mobility, reliability, accuracy and firepower, concerned analysts are compelled to understand and analyze the Second Artillery more precisely, including its evolving history, organization, and hardware, and their implications for international security.

To date, the most prominent work on these questions has either dwelled primarily on hardware and R&D¹¹⁴³, focused on doctrinal debates¹¹⁴⁴, or described the

¹¹⁴² Dr. Bates Gill holds the Freeman Chair in China Studies at the Center for Strategic and International Studies, Washington, D.C. His next book, *Contrasting Visions: the United States, China, and World Order* is forthcoming from the Brookings Institution Press in 2003.; James Mulvenon is an Associate Political Scientist at the RAND Corporation in Washington, DC and Deputy Director of RAND's Center for Asia-Pacific Policy. A specialist on the Chinese military, Dr. Mulvenon's current research focuses on Chinese strategic weapons doctrines (information warfare and nuclear warfare), ballistic missile defenses (TBMD) in Asia, Chinese military commercial divestiture, and the military and civilian implications of the information revolution in China.; Lieutenant-Colonel Mark Stokes is Senior Country Director for China and Taiwan in the Office of the Assistant Secretary of Defense for International Security Affairs. The authors wish to thank Ken Allen, Peter Almquist, John Corbett, Torrey Froscher, Catherine Johnston, Iain Johnston, Dunbar Lockwood, Evan Medeiros, Brad Roberts, Michael Swaine, and J. D. Yuan for comments on earlier drafts, and Kevin Pollpeter and James Reilly for their outstanding research assistance.

¹¹⁴³ See, for example, Mark A. Stokes, *China's Strategic Modernization: Implications for the United States*, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, September 1999; Robert S. Norris, Andrew S. Burrows, and Richard Fieldhouse, *Nuclear Weapons Databook, vol. 5, British, French, and Chinese Nuclear Weapons* Boulder: Westview Press, 1994; and Robert S. Norris and William M. Arkin,

technological development of Chinese strategic forces in the form of political-military histories.¹¹⁴⁵ Some past work, now more than ten years old, attempts to weave several of these strands together to present a "cultural" analysis of these issues.¹¹⁴⁶ More recent work from the mid-1990s by Johnston and Xue goes farthest in providing more unifying analyses which carefully draw together aspects of doctrine and force structure, yet this work to requires some reexamination in light of China's current strategic modernization efforts.¹¹⁴⁷

An updated and more comprehensive framework is needed to understand the Second Artillery's past, present, and future. Such an analysis would fully pull together China's declared nuclear principles with an empirical assessment of the Second Artillery's history, organization, and force structure. Taking such an approach, we reach several key findings on the Second Artillery's nuclear and conventional posture:

- The organizational history of the Second Artillery appears to be largely shaped by the introduction of *successively more sophisticated missile systems* in its arsenal, necessitating modifications of deployment, command and control, and procedures;
- One important trend in the current organizational structure is the introduction of *conventional missile units* alongside the traditional nuclear forces, suggesting a new tactical dimension to the force's roles and missions, including greater operational integration with other services of the PLA.
- From a technical perspective, while we agree with analysts who highlight the role of technology in shaping Chinese doctrine, we go beyond the somewhat simplistic understanding that technology drives doctrine. Rather, we see patterns of rational strategic choice made for China's nuclear posture, though technology limited the realm of the possible for Chinese leaders. Perhaps it

"British, French, and Chinese Nuclear Forces," *Bulletin of the Atomic Scientists*, November/December 1996.

¹¹⁴⁴ Alastair Iain Johnston, "China's New 'Old Thinking': The Concept of Limited Deterrence," *International Security*, vol. 20, no. 3, winter 1995/96.

¹¹⁴⁵ See, for example, John Wilson Lewis and Xue Litai, *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age*, Stanford: Stanford University Press, 1994; and John Wilson Lewis and Xue Litai, *China Builds the Bomb*, Stanford, CA: Stanford University Press, 1988.

¹¹⁴⁶ Chong-pin Lin, *China's Nuclear Weapons Strategy: Tradition within Evolution*, Lexington, Massachusetts: Lexington Books, 1988.

¹¹⁴⁷ Alastair Iain Johnston, "Prospects for Chinese Nuclear Force Modernization: Limited Deterrence Versus Multilateral Arms Control," *China Quarterly*, June 1996; and Litai Xue, "Evolution of China's Nuclear Strategy," in John C. Hopkins and Weixing Hu, eds., *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, New Brunswick, New Jersey: Transaction Publishers, 1995.

could be said that the Chinese made a *virtue out of necessity* in the construction of their nuclear deterrent, accepting the technological constraints of the system and making rational choices under those constraints.

- The evolution over time of China's doctrine and force structure is the story of trying to close the gap between real capability on the one hand, and what one might call "aspirational doctrine" on the other. In the U.S., the appropriate analog would be a comparison of current operational doctrine, as outlined in the Joint Doctrine publications series, with an aspirational doctrine, such as Joint Vision 2010. In the Chinese case, the discontinuity between reality and aspiration is oftentimes referred to as the "capabilities-doctrine gap." At the present stage in the Second Artillery's modernization, China is nearing an historic convergence between doctrine and capability, allowing it to increasingly achieve a degree of *credible minimal deterrence* vis-à-vis the continental United States – a convergence of its doctrine and capability it has not confidently possessed since the weaponization of China's nuclear program in the mid-1960s.
- Looking ahead, the doctrine and force structure of China's Second Artillery should be analyzed at three distinct levels, reflecting a multi-faceted force with very different missions: a posture of *credible minimal deterrence* with regard to the continental United States and Russia; a more offensive-oriented posture of *limited deterrence* with regard to China's theater nuclear forces; and an *offensively-configured, preemptive, counterforce warfighting posture* of "active defense" or "offensive defense" for the Second Artillery's conventional missile forces.

In reaching these findings, the work proceeds in six sections. First, we briefly consider several *declaratory principles* which have traditionally defined the Second Artillery's mission. Second, we provide an *historical overview* of the Second Artillery. In the next two sections, we detail the *operational organization* and *force structure* of the Second Artillery. A final two sections draw this analysis together to reach conclusions about the Second Artillery's *likely future force posture*, and its implications for international security.

CHINA'S NUCLEAR WEAPONS PRINCIPLES

We begin our analysis with an overview of China's traditionally declared nuclear-weapons principles. These principles are as close as China gets to a publicly declared "doctrine" for nuclear weapons. In the absence of an open and official declaration of the Second Artillery's doctrine, we examine these principles as a way to introduce China's conceptual approach to its strategic forces, and to inferentially deduce certain aspects of China's nuclear posture. In addition, a close examination of these principles reveals certain unanswered questions and inconsistencies which open the door to new and evolving missions for the Second Artillery. We consider these declared principles in

three parts: China's no-first-use principle, its negative and positive security assurances, and its declared adherence to nuclear weapon free zone agreements.¹¹⁴⁸

No First Use

Public Chinese statements consistently reiterate the "defensive" purpose of Chinese nuclear weapons to counterbalance foreign threats. Chinese leaders decided to pursue nuclear weapons in January 1955 due to U.S. nuclear threats during the Korean War and Taiwan Straits crisis of the early 1950s.¹¹⁴⁹ In a statement issued on the day of its first nuclear explosion in October 1964, China cited this achievement in its "struggle to strengthen [its] national defense and oppose the U.S. imperialist policy of nuclear blackmail and nuclear threats":

China cannot remain idle in the face of the ever-increasing nuclear threats from the United States. China is conducting nuclear tests and developing nuclear weapons under compulsion...China is developing nuclear weapons for defense and for protecting the Chinese people from U.S. threats to launch a nuclear war.¹¹⁵⁰

This declared "defensive" nuclear policy has changed little in the subsequent 35-plus years that China has been a nuclear weapon state. In a July 1997 speech to the U.S. Army War College, Lt. General Li Jijun, Vice President of the PLA's Academy of Military Science, reiterated China's public position regarding its nuclear posture:

China's nuclear strategy is purely defensive in nature. The decision to develop nuclear weapons was a choice China had to make in the face of real nuclear threats. A small arsenal is retained only for the purpose of self-defense. China has unilaterally committed itself to responsibilities not yet taken by other nuclear nations, including the declaration of a no-first-use policy, the commitment not to use or threaten to use nuclear weapons against non-nuclear states and in nuclear-free zones...In short, China's strategy is completely defensive, focused only on deterring the possibility

¹¹⁴⁸ The database on China compiled by the East Asia Nonproliferation Project, Center for Nonproliferation Studies, Monterey Institute of International Studies, is particularly helpful in covering the Chinese nuclear principles discussed here.

¹¹⁴⁹ See, for example: Lewis and Xue, *China Builds the Bomb*, pp. 11-34.

¹¹⁵⁰ Statement of the Government of the People's Republic of China, 16 October 1964, found in Lewis and Xue, *China Builds the Bomb*, pp. 241, 242.

of nuclear blackmail being used against China by other nuclear powers.¹¹⁵¹

The cornerstone of this publicly-declared defensive position is China's NFU policy. Since first detonating a nuclear device in October 1964, China has consistently declared an unconditional NFU policy.¹¹⁵² Since that time, China has persistently proposed that nuclear weapon states conclude a no-first-use agreement. The achievement of such an agreement was one of China's initial bargaining points in its CTBT negotiations. Later, China sought to gain such an agreement with the United States in return for a Sino-U.S. detargeting pledge. Neither of these efforts succeeded, though the CTBT was completed and a Sino-U.S. detargeting deal was reached. However, China and Russia signed a bilateral NFU accord in September 1994.

Negative and Positive Security Assurances

Another set of declaratory principles involves both negative and positive security assurances (NSAs and PSAs). As for NSAs, China's declaratory stance is clear:

China undertakes not to use or threaten to use nuclear weapons against non-nuclear-weapon States or nuclear-weapon-free zones at any time or under any circumstances. This commitment naturally applies to non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons [NPT] or non-nuclear-weapon States that have undertaken any comparable internationally binding commitments not to manufacture or acquire nuclear explosive devices.¹¹⁵³

Of note here is China's pledge not to use nuclear weapons against non-nuclear weapon states (i.e. Japan) under any circumstances; the U.S. NSA, for example, is conditional in retaining the possibility of nuclear weapons use against non-nuclear weapon states who take part in an attack on U.S. territory, armed forces, or allies.¹¹⁵⁴

As for PSAs, China has agreed with the other four major nuclear weapon states (France, Great Britain, Russia and the United States) to work within the Security Council

¹¹⁵¹ Lieutenant General Li Jijun, *Traditional Military Thinking and the Defensive Strategy of China*, Letort Paper No. 1, Carlisle Barracks, PA: U.S. Army War College, 29 August 1997, p. 7.

¹¹⁵² China's no-first-use pledge: "China undertakes not to be the first to use nuclear weapons at any time or under any circumstances." See *China's National Statement On Security Assurances*, 5 April 1995.

¹¹⁵³ Ibid.; see also China's white paper entitled *China: Arms Control and Disarmament*, Beijing: Information Office of the State Council, November 1995.

¹¹⁵⁴ As presented by Ambassador Steven J. Ledogar, U.S. Ambassador to the Conference on Disarmament, 6 April 1995.

to take "appropriate measures to provide ... necessary assistance to any non-nuclear weapon State that comes under attack with nuclear weapons."¹¹⁵⁵ The precise nature of the assistance is not elaborated, and the Chinese statement makes clear that this position does not in any way compromise its desire for a universal NFU pledge and unconditional NSAs, nor does it endorse the use of nuclear weapons.

Of related note, Chinese declaratory policy is particularly critical of the policy of extended nuclear deterrence, or so-called "nuclear umbrellas," provided by other nuclear weapon states to their allies. In operational terms, this means China officially opposes the deployment of nuclear weapons outside national territories, and states that it has never deployed nuclear weapons on the territory of another country, a point corroborated by open-source evidence. When Japan sanctioned China for continued nuclear testing in 1995 and 1996 during the course of the CTBT negotiations, Beijing derisively dismissed Japanese censure as hypocritical, citing the fact that Japan enjoyed the protection of extended deterrence.

Nuclear Weapon Free Zones

China has signed onto several nuclear weapon free zone (NWFZ) treaties. These are the Treaty of Pelindaba (Africa NWFZ), the Treaty of Raratonga (South Pacific NWFZ), and the Treaty of Tlatelolco (Latin American NWFZ). During the ASEAN Regional Forum Minister's meeting in July 1999, China stated it would also sign the Southeast Asian NWFZ Treaty. In its 1995 white paper on arms control and disarmament, the Chinese government stated its support for "the establishment of nuclear-free zones in the Korean Peninsula, South Asia, Southeast Asia, and the Middle East."¹¹⁵⁶

At a conference focusing on a Central Asian NWFZ convened in Tashkent in September 1997, a Chinese Foreign Ministry official heading the Chinese delegation listed seven principles related to the establishment of NWFZs. Among them, China insisted that "any other security mechanism" should not interfere with the non-nuclear status of a nuclear weapon free zone, including military alliance relationships. In addition, perhaps with reference to the South China Sea, the Chinese official declared that NWFZs should not include "areas where there exist disputes over sovereignty of territory or maritime rights." He also called on nuclear weapon states to commit to an unconditional pledge not to use nor threaten to use nuclear weapons against NWFZs.

In practice, China's adherence to NWFZ pledges does not greatly affect its nuclear weapon deployments, especially given that it deploys no nuclear weapons abroad. Should China sign and ratify the Southeast Asian NWFZ Treaty, then presumably this would place an added political onus on its ability to threaten or use nuclear weapons against such targets as Vietnam or the Philippines, and, depending on caveats, if any, at the time of its signing, could also affect use in the South China Sea. However, the pledges of nuclear weapon states to adhere to NWFZs are not verifiable, and some include escape

¹¹⁵⁵ See China's National Statement.

¹¹⁵⁶ See China: Arms Control and Disarmament.

clauses. For example, in signing the Treaty of Raratonga (South Pacific NWFZ), China stated that it could reconsider obligations in the event that other nuclear weapon states or treaty parties violated the treaty.

Conceptual Contradiction and Evolution

In reviewing these principles, we note a number of inconsistencies relevant to China's Second Artillery force modernization and doctrinal evolution.

First, a number of questions attend China's no-first-use (NFU) pledge. First, such a pledge is highly symbolic – it is not verifiable and any violation of the pledge would not be detected until it is too late. Second, as a practical matter, we need to recognize that the NFU pledge is probably less an altruistic principle, and more a simple reflection of the traditional operational constraints imposed on Chinese doctrine by the country's qualitatively and quantitatively limited nuclear arsenal: China maintains an NFU pledge because it fits with the realities of nuclear weapons inventory. As its force structure changes, so too might its NFU principle. Over the years there have been some indications that China's pledge may not be relevant to the first-use of nuclear weapons on Chinese soil. Faced with the threat of a conventional Soviet invasion in the 1980s, Beijing's military strategists argued that the first-use of nuclear weapons on Chinese territory would not have violated its NFU pledge. Similarly, mounting evidence in Chinese military writings and through interviews suggests increased unhappiness within the PLA about the NFU pledge, especially in consideration of the overwhelming stand-off conventional force of countries such as the United States. Revisions to the NFU pledge could advocate launch-on-warning or launch-under-early-attack policies.¹¹⁵⁷

In adhering to its NSAs and PSAs, China's deployments and targeting would presumably be focused only on nuclear weapon states and possibly other states not party to the NPT or similar arrangements (such as India, for example). However, several questions arise about China's commitments, particularly with regard to NSAs. For example, like the NFU pledge, China's NSAs are not verifiable or enforceable. Also, the pledge would not apply to such states as India, Israel and Pakistan, which are not members of the NPT. Even if they joined, the question arises whether China's NSA would apply to a country such as India, which while not officially recognized by China as a nuclear weapon state, certainly has attained such *de facto* status.

In addition, observers question the need for certain Chinese deployments – such as the DF-21 series – insofar as its range and basing means its possible targets largely comprise non-nuclear weapon states. For example, the DF-21's basing and ranges suggest targets in Japan, Korea, Okinawa, the Philippines, or Vietnam, in addition to targets in the Russian Far East and India. If it is true, as asserted by Lewis and Xue, that China's target sets for the DF-3 included U.S. bases in the Philippines and Japan, this also runs contrary to Chinese NSAs. The fact that the DF-3 and-4 series missiles are already capable of reaching Russian and Indian targets raises further questions as to the purpose of the DF-21 series in the context of Chinese NSAs.

¹¹⁵⁷ Johnston, "China's New 'Old Thinking'," pp. 21-23.

We draw a number of points from this discussion of Chinese declaratory principles. First, these traditional principles are generally consistent with a “defensive” posture and a qualitatively and quantitatively limited nuclear arsenal. Given the reality of Chinese nuclear forces, therefore, these pledges come at little to no real “cost” in terms of reductions, disarmament, or dramatic alterations to Chinese nuclear posture overall. Second, with the possible exception of some deployments, such as the DF-21 series ballistic missile, the nuclear principles noted here are consistent with a posture largely concerned with the other major nuclear weapon states (especially the United States and the Soviet Union/Russia), as well as India. Third, nothing in these principles necessarily precludes China’s nuclear weapons modernization program, but might place political limits on targeting and use options. Finally, while these principles may give us an overall understanding about China’s formally stated views about when it would *not* use nuclear weapons, they provide no details about when they *would*.

In the end, we recognize that not only do these principles raise several unanswered questions, but China’s ongoing strategic force modernization introduces pressures to possibly alter and refine them consistent with new strategic realities. Only through an empirical examination of the history, organization, and force structure of the Second Artillery can we address these unanswered questions and better grasp the Second Artillery’s future posture.

HISTORY OF THE SECOND ARTILLERY CORPS

There is little open source information on institutional history of the Second Artillery. Official accounts relate that the service was formally created on 1 July 1966 in Beijing.¹¹⁵⁸ Premier Zhou Enlai reportedly chose the name “Second Artillery Corps” (*Dierpaobing*) for the new force, which he sought to distinguish from the PLA’s traditional artillery corps (*paobing*).¹¹⁵⁹ Zhou also reportedly allocated the national People’s Armed Police headquarters to the force in 1969, when the former was disbanded.¹¹⁶⁰ By 1986, the Second Artillery built its own headquarters in Xishan,

¹¹⁵⁸ Song Shilun, ed., *Zhongguo junshi baike quanshu: junzhi fence (shang)* [Chinese Encyclopedia of Military Affairs: Volume 1], Beijing: Junshi kexue chubanshe, 1995, p. 280.

¹¹⁵⁹ “The Casting of China’s Shield of Peace – A Record of Actual Events in the Development of the Second Artillery,” *Xinhua*, 7 July 1996, in FBIS-CHI-96-137, 7 July 1996.

¹¹⁶⁰ This explains the sometimes-heard misconception that the Second Artillery shielded the PAP from the excesses of the Cultural Revolution. In fact, the national-level PAP was abolished, and its political commissars stayed in place to perform the same role for the new tenant. The authors are grateful to Michael Schoenhals for this insight.

which can be seen from the road to the Badaling section of the Great Wall, northwest of Beijing.¹¹⁶¹

The overall institutional development of the Second Artillery can be divided into four critical phases.¹¹⁶² Phase one was the “implementation of the plan of building strategic weapons in 1962. Phase two, which lasted from 1964 to 1977, centered on was research and development. Phase three, beginning in 1986 and ending in 1993, focused primarily on the replacement of the older generation of weapons. Phase four, which spans 1994 to the present, is principally concerned with the upgrading, development, and preparatory research.

Though the Second Artillery itself was created in 1966, the construction of China’s missile capability and corresponding infrastructure assets began a number of years earlier. In 1956, the Central Committee Secretariat and the Politburo reportedly made the decision to develop guided missiles.¹¹⁶³ In October 1956, the Defense Ministry’s Fifth Academy, China’s first guided missile technology research institute, was established.¹¹⁶⁴ On 9 December 1957, more than 6000 cadres and soldiers from various military units and scientific research institutes reportedly established a ground-to-ground guided missile (*didi daodan*) training brigade.¹¹⁶⁵ In June 1959, the Central Military Commission decided to dissolve the training group and establish two strategic guided missile combat battalions.¹¹⁶⁶ On 18 March 1960, the first of the two proposed battalions was formally established at an artillery school in northwest China, with the hope that it would serve as a “seed unit” (*zhongzi budui*) of officers for the units to follow.¹¹⁶⁷ On 10 September 1960, China successfully launched its first R-2 guided missile, with help from the Soviet

¹¹⁶¹ From “Revealing Secret of China’s Procedure for Pressing Nuclear Button”, in *Tai yang pao* [Hong Kong], 31 January 2000, in FBIS, FTS20000206000049.

¹¹⁶² These demarcations can be found in “Jiang Zemin Defines Position of China’s Strategic Rocket Forces”, *Tai yang pao* [Hong Kong], 17 July, 2000, in FBIS, CPP20000717000021.

¹¹⁶³ Liu Jingzhi, “Proudly Smiling at the Vast Sky – On the 50 Years of China’s Missile Family,” *Guangming ribao*, 14 September 1999, in FBIS, 17 September 1999.

¹¹⁶⁴ *Ibid.*

¹¹⁶⁵ Zhang Jiajun and Zao Zhi, “The Strong Contingent of Secret Rockets – The Historical Course of China’s Strategic Guided Missile Units,” *Xinhua*, 7 July 1996, in FBIS-CHI-96-135, 7 July 1996. The brigade designation of the unit can be found in Zhang Jiajun and Sun Jinhan, “Casting the Shield of Peace – Second Artillery Commander Yang Guoliang and Political Commissar Sui Yongju Talk About Building of Strategic Missile Force,” *Liaowang*, No. 29, 21 July 1997, pp. 4-7, in FBIS, 28 August 1997.

¹¹⁶⁶ Zhang Jiajun and Zao Zhi, “The Strong Contingent of Secret Rockets”.

¹¹⁶⁷ *Ibid.* The term “seed unit” and the brigade designation of the unit can be found in Zhang Jiajun and Sun Jinhan, “Casting the Shield of Peace.”

Union.¹¹⁶⁸ In 1963, the CMC made a decision to establish a strategic guided missile training battleground.¹¹⁶⁹ Then deputy chief of staff Zhang Aiping led an inspection team to find a suitable site. On 28 September 1963 (another account claims autumn 1964), “tens of thousands” of officers and men from 88 army units assembled to construct the first strategic guided missile base.¹¹⁷⁰ In October 1963, the missile battalion launched its first missile.¹¹⁷¹ China’s first atomic bomb was successfully detonated on 16 October 1964, paving the way for the mating of weapon to delivery vehicle.

Other developmental milestones followed the formal establishment of the unit. According to official sources, the missile force in the “mid-seventies” organized a “long-range firing exercise with live warheads,” involving “moving, camouflaging, and launching.”¹¹⁷² The same source reports that this was the first time that the force operated “independently” as well as the first time that it employed “mechanized features,” suggesting mobility. The soldiers fired four missiles in a “very short time” that hit their targets, leading Chinese experts to conclude that China’s missile inventory was moving toward “maturity.” On 18 May 1980, China successfully launched its first intercontinental ballistic missile.¹¹⁷³ In the early 1980s, the missile force reportedly conducted its first “large-scale combined battle exercise” (*hecheng xunlian zhanyi yanxi*). These trends were conducted in parallel with the testing and deployment of an increasingly capable inventory of missiles, explored in much greater detail in the force structure section below. On National Day in 1984, a Chinese strategic missile formation paraded through Tiananmen Square, marking the first public appearance of Second Artillery units.¹¹⁷⁴ A similar appearance was made at the 50th anniversary celebration in October 1999. In the early winter of 1994, the Second Artillery reportedly conducted its first “position survival exercise,” involving emergency nuclear and chemical pollution monitoring and clean-up after being subjected to a surprise nuclear attack and launching a nuclear counterattack.¹¹⁷⁵

¹¹⁶⁸ Liu Jingzhi, “Proudly Smiling at the Vast Sky.”

¹¹⁶⁹ Zhang Jiajun and Zao Zhi, “The Strong Contingent of Secret Rockets.”

¹¹⁷⁰ “The Casting of China’s Shield of Peace – A Record of Actual Events in the Development of the Second Artillery,” *Xinhua*, 7 July 1996, in FBIS-CHI-96-137, 7 July 1996.

¹¹⁷¹ Xu Zuzhi, “China’s Strategic Missile Unit Now Possesses Fighting Capability Under High-Tech Conditions,” *Zhongguo xinwen she*, 1 October 1999, in FBIS-CHI-1999-1002, 1 October 1999.

¹¹⁷² “The Casting of China’s Shield of Peace.”

¹¹⁷³ Liu Jingzhi, “Proudly Smiling at the Vast Sky”.

¹¹⁷⁴ Xu Zuzhi, “China’s Strategic Missile Unit.”

¹¹⁷⁵ *Ibid.*

One of the most significant recent developments for the Second Artillery has been the introduction of conventionally-tipped missiles into its inventory, particularly short-range ballistic missiles aimed at Taiwan such as the Dongfeng-15 (DF-15) missile, known more commonly in the West by its export designation, M-9, or the Pentagon as the CSS-6; and the shorter-range Dongfeng-11 (DF-11), also known as the M-11 or CSS-7. Other systems discussed in the context of a Taiwan scenario are the DF-21 (CSS-5) and other longer-range systems.

From open sources, the DF-15 is judged to have a range of roughly 600km, with a payload of 500kg. It is capable of delivering both conventional and nuclear payloads, as well as chemical, biological, and cluster munition warheads. Estimates of CEP were initially pegged at 600m. This assessment was based on an algorithm that calculated CEP as 1% of range. Since 1996, there have been frequent reports that the Chinese are attempting to improve the guidance of these missiles utilizing the U.S.-built Global Positioning System (GPS) satellite cluster.¹¹⁷⁶ In their 1996 RAND report on GPS-aided guidance for ballistic and cruise missiles, Irving Lachow and Gerald Frost concluded that a hypothetical missile with the DF-15's parameters, aided by GPS correction in the boost phase, could achieve significant improvements in accuracy.¹¹⁷⁷ The M-11 SRBM, also known as the DF-11 or CSS-7, is a mobile, solid-fueled missile with a 300km missile and a 500kg payload. A recent Department of Defense report asserted that the M-11 "has not yet entered the PLA's inventory," though "an improved, longer-range version may be under development."¹¹⁷⁸

ORGANIZATION OF THE SECOND ARTILLERY CORPS

The Second Artillery is China's Strategic Rocket Force, commanding its conventional- and nuclear-tipped missile arsenal. Unlike the Soviet Strategic Rocket Forces, the Second Artillery is not a service branch (*junzhong*), on par with the Ground Forces, Navy, and Air Force (known collectively in Chinese as *luhaikong*). Instead, the Second Artillery is only a service arm (*bingzhong*), which is one-half notch lower in bureaucratic rank.¹¹⁷⁹ This, rather than attempts at deception, probably explains why Chinese discussions of the service branches never includes the Second Artillery.

The Second Artillery, with an estimated 90,000 personnel, consists of headquarters elements, six launch bases (*jidi*), one engineering design academy, four research

¹¹⁷⁶ This analysis can be found in Irving Lachow and G. Frost, "Satellite Navigation-Aiding for Ballistic and Cruise Missiles," Santa Monica, Calif: RAND, RP-543, 1996.

¹¹⁷⁷ Ibid.

¹¹⁷⁸ Secretary of Defense, "The Security Situation in the Taiwan Strait," Report to Congress Pursuant to the FY99 Appropriations Bill, 1 February 1999.

¹¹⁷⁹ For a discussion of service branches versus service arms, see Song Shilun, ed., *Zhongguo junshi baike quanshu*, pp. 141-143. Other service arms include tank, artillery, air defense, engineering, communication, and chemical defense units.

institutes, two command academies, and possibly an early warning unit.¹¹⁸⁰ As key operational strike units, brigades are likely only assigned one type of missile to facilitate command and logistics. The Second Artillery headquarters and subordinate bases oversee warhead and missile storage facilities; maintenance units; and special warhead/missile transportation services.¹¹⁸¹

As a strategic-level asset, the Second Artillery is subject to strict command and control from the center. By necessity, it is therefore a very stove-piped institution, perhaps the most vertically integrated of all units within the People's Liberation Army. At the top of the structure sits the Second Artillery Headquarters, followed by the missiles bases and their subordinate launch brigades and companies.

Headquarters (*Silingbu*)

The headquarters of the Second Artillery shares many of the same organizational features as other headquarters units within the PLA's service branches. The national-level HQ is theoretically the highest command authority, and bears particular responsibility for policy, training and equipping the Rocket Forces. The HQ likely enjoys functional (*yewu*) control over planning, requirements, and budgeting, while the bases exercise administrative (*xingzheng*) control over the units in the field. During peacetime, the HQ likely maintains operational control of the forces, but wartime situations most likely would necessitate ad hoc arrangements. For the conventional forces, Chinese sources suggest a "skip echelon" command structure would be established, with the national command authority in Beijing dealing directly with a temporary "war front" (*zhanqu*) command.¹¹⁸² During a wartime situation, multiple conventional brigades would be subsumed into a conventional theater missile corps (*juntuan*) consisting of a corps command post, a corps logistics command post, and a number of subordinate theater missile brigades each with different types of theater missiles (see Figure 11.1). The corps command post would largely consist of command authorities from Beijing and Huangshan.¹¹⁸³ The theater command center (*zhanyi zuozhan zhongxin*) would direct

¹¹⁸⁰ Bases are located at Shenyang (80301 Unit); Huangshan (80302 Unit); Kunming (80303 Unit); Luoyang (80304 Unit); Huaihua (80305 Unit); and Xining (80306 Unit).

¹¹⁸¹ "The Strategic Nuclear Force Organization," in *Guojia junzhixue* [The Science of the State Military System], undated, p. 3.

¹¹⁸² See Liu Zhenwu, ed., *Xiandai jundui zhihui* [Modern Military Command and Control], 2nd ed., Beijing: National Defense University Press, 1994, pp. 393-394.

¹¹⁸³ *Lianhe zhanyi di erpaobing zuozhan*, p. 4. Another article supports the assertion that conventional Second Artillery units would be subsumed into the theater command structure, but notes that Beijing may direct operations through the Second Artillery chain-of-command. See Li Junsheng, "Lianhe zhanyi didi changgui daodan budui zuozhan zhihui wenti tantao" [Inquiry Into Joint Conventional Theater Surface-to-Surface Missile Unit Operational Command Problems], in *Lianhe zhanyi yu*

the missile campaign as one component of a joint strike force that also would include air forces, ground force artillery and tactical missiles, electronic attack assets, and special operations.¹¹⁸⁴ Coordination will be carried out via a firepower coordination cell (*huoli xietiaozu*) within the theater command center.¹¹⁸⁵

For the nuclear forces, the evidence strongly suggests that the national command authority in Beijing would always retain strict control.¹¹⁸⁶ Reportedly, the authority to use nuclear weapons rests collectively with the Standing Committee of the Political Bureau and the Central Military Commission (both groups now headed by Jiang Zemin).¹¹⁸⁷

In peacetime, the Second Artillery HQ staff is led by a primary echelon of comprised of four "first-level" (*yijibu*) departments (see Figure 11.2): headquarters department (*silingbu*), political (*zhengzhibu*), logistics (*houqinbu*), and technical and equipment department (*jizhuangbu*)/armament department (*zhuangbeibu*). These departments have a vertical (*tiao*) relationship with the four general departments in Beijing.¹¹⁸⁸ Other top-level units include the discipline inspection commission (*jilu jiancha weiyuanhui*), which is probably subordinate to the Second Artillery Party Committee and the Central Military Commission's Discipline Inspection Commission.¹¹⁸⁹

Key personnel at Second Artillery HQ include the commander (*silingyuan*), political commissar (*zhengwei*), deputy commanders (*fusilingyuan*), deputy political commissars (*fuzhengwei*), and department directors. The principal leadership body within

junbingzhong zuozhan, pp. 228-231. Li is from an unidentified (probably Second Artillery) Third Research Institute.

¹¹⁸⁴ Guan Lingen, "Brief Analysis of Combined Fire Assault," *Jiefangjun bao*, 21 April 1998, p. 6, in FBIS-CHI-0519-98.

¹¹⁸⁵ See Sun Xiaohu, "Jiaqiang huoli xietiao, fahui zhengti weili" [Strengthen Firepower Coordination, Give Play to Comprehensive Power], in *Lianhe zhanyi yu junbingzhong zuozhan* [Joint Theater and Service Operations], Beijing: National Defense University Press, 1998, pp. 281-285. Senior Colonel Sun is Deputy Director of the Guangzhou Military Region Service Arms Department.

¹¹⁸⁶ See Michael Swaine, *The Military and Political Succession in China: Leadership, Institutions, Beliefs*, Santa Monica, Calif.: RAND, R-4254-AF, 1992, pp.122-27.

¹¹⁸⁷ See "Revealing Secret of China's Procedure for Pressing Nuclear Button."

¹¹⁸⁸ Kenneth Lieberthal and Michel Oksenberg, *Policy Making in China: Leaders, Structures, and Processes*, Princeton, New Jersey: Princeton University Press, pp.141-142.

¹¹⁸⁹ Wang Shiyu, "Qufen dangji zhengji, shixing kou ban'an [Differentiate Party Discipline and Government Discipline and Implement with Appropriate Agencies]," *Jiefangjun bao*, 9 December 1987.

the forces is the HQ party committee. Extrapolating from other similar units in the PLA, the political commissar is likely the secretary of the party committee, with the commander serving as deputy secretary. The other leadership personnel listed above would likely form the standing committee (*changwei*) of the party committee.

Headquarters Department (*Silingbu*)

The Headquarters Department manages the organizational structure, plans, deployment, transfer, and battlefield development of the Second Artillery operational and support troops. It is headed by a chief of staff and three deputy chiefs of staff. During a crisis, the apex of the HQ department is likely the Second Artillery Command and Control Center (*Erpao zhihui kongzhi zhongxin*).¹¹⁹⁰ According to reports, a centralized crisis command center was established at Xishan in 1986, with two subordinate command centers set up in Wuwei in the Lanzhou Military Region and in Mianyang, in the Chengdu Military Region. At the time these subordinate centers were under the direction of Yang Dezhi and Yu Qiuli; command for the regional centers was transferred to Hong Xuezhong and Chi Haotian with the ascent of Jiang Zemin to chair the Central Military Commission in 1989. In 1995, three more regional command centers were reportedly established at Taiyuan, Shanxi province, Lushan, Henan province, and Weining, Guizhou province.¹¹⁹¹

Some second-level departments (*erjibu*) can be identified (see Figure 11.3):

- The Political department (*zhengzhibu*) is charged with overseeing political work within the headquarters department. Probably has vertical relationship with the General Political Department and a horizontal relationship with the Second Artillery HQ Political Department. Division likely contains subordinate cadre affairs, party affairs, and propaganda divisions.
- The Communications department (*tongxinbu*) is responsible for the construction and transmission of communications between the Second Artillery headquarters and superordinate and subordinate units. It is known to have an Electronic Countermeasures (ECM) Regiment and a Communications Regiment, as well as a number of communications main stations (*tongxin zongzhan*).
- The training department (*junxunbu*) is probably responsible for developing training policies for subordinate bases and launch brigades.
- The military affairs department (*junwubu*) is probably responsible for general Second Artillery HW affairs, organizational issues, and recruiting.

Two additional likely second-level departments (*erjibu*) are an intelligence department (*qingbaobu*), charged with intelligence analysis, and a schools department (*junxiaobu*), responsible for planning, budget, regulations, facilities, administration,

¹¹⁹⁰ Lu Chunming, "Zhichu zuozhan zhihui zonghe kongzhitai [Integrate Operational Command And Control Platforms], *Jiefangjun bao*, 13 August 1988.

¹¹⁹¹ See "Revealing Secret of China's Procedure for Pressing Nuclear Button."

curricula, students, and staff at the Second Artillery's various professional military education institutions. Other incidental units include a mapping unit (*ditu dadui?*), computer center, weather center, and scientific research division (*keyanchu*). The scientific research division reportedly has a technology division (*jishuchu*).¹¹⁹² The mapping unit combines more than 10 types of specialized mapping sub-units, including a terrain squadron (*dizing zhongdui*).

Political Department (*Zhengzhibu*)

The Political Department is charged with political work within the Second Artillery. It is led by a director, four deputy directors, and the directors of the divisions. Along with the party committees (*dang weiyuanhui*, or *dangwei* for short) and the political commissar system (*zhengwei*), the political department (*zhengzhibu*) manages personnel, propaganda, and morale affairs. Known second-level departments (*erjibu*) of the political department itself include (see Figure 11.4):

- The general office (*bangongshi*) is responsible for staff and paperwork within the Second Artillery political department. It likely contains subordinate units responsible for secretaries (*mishuchu*), documents (*guan dang'an chu*), and a confidential bureau (*jiyao*) for couriers and encrypted communications.
- The organization department (*zuzhibu*) is responsible for party affairs, overseeing the party committees throughout the Second Artillery HQ and at lower levels.
- The propaganda department (*xuanchuanbu*) is responsible for the dissemination of propaganda to lower levels, including internal Second Artillery publications like 2nd Artillery's internal newspaper and the *neibu* journal *Changying* [Flying Eagle].
- The security department (*baoweibu*) is responsible for all security affairs, ranging from physical security to counterintelligence.
- The culture department (*wenhuabu*) is in charge of cultural education and recreational affairs, and likely sponsors programs of activities for the rank-and-file.

Other likely second-level departments (*erjibu*) include:

- The cadre department (*ganbubu*) is responsible for personnel matters, including appointments, promotions, demotions. It likely includes a retired cadre bureau (*laoganbujū*).
- The liaison department (*lianluobu*)

¹¹⁹² Zhang Jiajun, "Chuangzao lianghao keyan huangjing, jiasu guofang keji fazhan [Building a Quality Research Environment, Enhancing National Defense Development]," *Jiefangjun bao*, 10 April 1989.

- The mass work department (*qungongbu*) is responsible for relations between the Second Artillery headquarters and the local government and population.
- The procurate (*jianchayuan*) investigates disciplinary matters. It likely works closely with the Second Artillery Discipline Inspection Commission.
- The court (*fayuan*) tries personnel accused of crimes. It likely interacts with both the procurate and the Discipline Inspection Commission.

Logistics Department (*Houqinbu*)

The Logistics Department is responsible for all logistics affairs within the Second Artillery, including budgeting, transportation, fuel, equipment, health, armaments, housing, and logistics training and research. Five main second-level departments can be confirmed (see Figure 11.5):

- The General office (*bangongshi*) is responsible for staff and paperwork within the headquarters department. It likely contains subordinate units responsible for secretaries (*mishuchu*), documents (*guan dang'an chu*), and a confidential bureau (*jiyaoju*) for couriers and encrypted communications.
- The transportation department (*yunshubu*) is responsible for the procurement and maintenance of all Second Artillery transportation. It has a materials division (*qicaichu*)
- The materials and petroleum, oils and lubricants department (*wuzibu*) is mainly responsible for supply of all materials, as well as the procurement, storage, distribution of fuel and fuel-related equipment. The sub-units beneath the materials division are divided between those that deal with “common” (*tongyong*) and “special-use” (*zhuanyong*) materials, the latter of which may involve nuclear materials.¹¹⁹³
- The armament department (*junxiebu*)
- The capital construction and barracks department (*yingfangbu*) is responsible for the design, construction, and maintenance of all Second Artillery facilities.
- The health department (*weishengbu*) is responsible for health affairs within the Second Artillery, including medical aid and family planning. It is also likely responsible for the management of all subordinate medical facilities, including hospitals, sanatoriums, and research institutes.

Based on extrapolation from similar units, other likely Logistics Department second-level departments include:

¹¹⁹³ Zhang Jiajun, “*Linghuo, duobian, kexue* [Agile, Varied, Scientific],” *Jiefangjun bao*, 28 September 1988.

- The general office (*bangongshi*) is responsible for staff and paperwork within the Second Artillery logistics department. It likely contains subordinate units responsible for secretaries (*mishuchu*), documents (*guan dang'an chu*), and a confidential bureau (*jiyaoju*) for couriers and encrypted communications.
- The political department (*zhengzhibu*) is charged with overseeing political work within the logistics department. Probably has vertical relationship with the General Political Department and a horizontal relationship with the Second Artillery HQ Political Department. Division likely contains subordinate cadre affairs, party affairs, and propaganda divisions.
- The finance department (*caiwubu*) likely formulates the Second Artillery budget, requests funding from the center, dispenses funds to lower levels, and supervises accounting for units at all levels of the system. It likely contains an audit bureau (*shenjiju*).
- The quartermaster department (*junxubu*) is responsible for the planning, procurement, storage, and distribution of provisions and clothing.

Other ancillary offices likely include the research office (*yanjiushi*), equipment research office (*zhuangbei yanjiushi*), and production management office (*shengchan jingying bangongshi*), which controls farms and other economic units.

Technical and Equipment Department (*Jizhuangbu*)

The Technical and Equipment Department is charged with engineering support, equipment maintenance, repair and overhaul of equipment, procurement, R&D, and storage. Units formerly relied on local factories, but in 1984 began working on "self-reliance." In 1987, intermediate and depot-level maintenance on 120 items was achieved. One second-level department, the procurement department (*dinggoubu*), has been identified (see Figure 11.6). Three other sub-units can be identified: a science and technology committee, science and technology information center¹¹⁹⁴, and repair and spare parts factories/shops (*xiupeichang/suo*). Other likely second-level departments are a general office (*bangongshi*), which manages staff and paper work within the technical and equipment department, and political department (*zhengzhibu*), which oversees political work within the technical and equipment department.

Base Units (*Jidi*)

Beneath the headquarters, the next important organizational unit is the "base," or *jidi*. It shares the same four "first-level" departments as the headquarters (HQ, political, logistics, and technical/equipment), as well as most of the second-level departments (see Figure 11.7). These departments, which perform the same roles as their counterparts though at a lower-level, report horizontally to the base leadership, as well as vertically to their superior units at the national headquarters level. Other corps/base support elements

¹¹⁹⁴ Directory of Military Personalities, October 1999, p. 56.

include a reconnaissance unit (*jizhen dadui*); a surveying/mapping unit (*cehui dadui*); a computer center (*jisuan zhongxin*); a weather center (*qixiang zhongxin*); a communications regiment (*tongxintuan*); an ECM regiment (*dianzi duikangtuan*); and an engineering regiment (*gongchengtuan*). Additional engineering, air defense, and anti-chemical units can be assigned as needed.¹¹⁹⁵ Among the units unique to the base level are a set of "equipment assurance units" (*zhuangbei baozhang budui*) which includes a missile/warhead storage unit (*zhuangbei jishu qinwu budui*), a transfer station (*zhuanzunzhan*), and a repair depot (*tezhuang xiulicang*).

Brigade Units (Nuclear)

Replicating most of the higher levels of command, a typical nuclear missile brigade contains four first-level departments, including headquarters, political, logistics, and equipment technology (*jizhuangbu*) departments, as well as most of the second-level departments. These offices, which perform the same roles as their counterparts though at a lower-level, report horizontally to the brigade leadership, as well as vertically to their superior units at the base and national headquarters level during non-crisis situations. During crisis and wartime situations, the nuclear brigades likely report directly to the national command center in the Western Hills (*Xishan*) in Beijing.

Very little is known from open sources about the structure of units for the silo-based nuclear brigades. Extrapolating from our understanding of the structure of mobile conventional theater missile brigades, the unique nuclear brigade elements for mobile forces, such as the DF-21 and DF-31, likely include a mobile brigade command post, a central depot (known as a "technical position" or *jishu zhendi*), a transfer point (*zhuanzai changping*), and an assigned set of pre-surveyed launch sites (*fashe zhendi*), as well as a set of reserve (*daiji*) launch sites. A mobile nuclear missile brigade also likely has a set of "equipment assurance sub-units" (*zhuangbei baozhang fendui*).¹¹⁹⁶ Brigades probably have multiple firing battalions (*fasheyings*), with each battalion assigned multiple companies.¹¹⁹⁷ Companies subordinate to the launch battalion likely would be assigned at least one launcher, an electric power generation vehicle (*fadianche*), a surveying vehicle (*cekongche*), a communications command vehicle (*tongxun zhihuiche*), and a

¹¹⁹⁵ Ibid, p. 5. During peacetime, these units are subordinate to the base headquarters.

¹¹⁹⁶ Ibid, p. 4. The equipment assurance sub-units, the transfer point, and the transport may be the responsibility of a battalion-level "technical unit" (*jishu ying*). A nuclear brigade's technical battalion manages a warhead station (*dantizhan*), an inspection station (*zhuangjianzhan*), and a technical service station (*jishu qinwuzhan*). See "Guangrong bang [Glorious Honor Roll]," *Chang ying* [*Flying Eagle*], undated 2 November 1993, p. 11 (hereafter "Glorious Honor Roll").

¹¹⁹⁷ For reference to a fourth battalion within a Second Artillery brigade structure, see "Glorious Honor Roll," p. 10.

missile transport vehicle (*daodan yunshuche*). Battalions and companies would be assigned a zone within which to operate.¹¹⁹⁸

Brigade Units (Conventional)

Replicating most of the higher levels of command, a typical conventional theater missile brigade contains four first-level departments, including headquarters, political, logistics, and equipment technology (*jizhuangbu*) departments, as well as most of the second-level departments. These offices, which perform the same roles as their counterparts though at a lower-level, report horizontally to the brigade leadership, as well as vertically to their superior units at the base and national headquarters level during non-crisis situations. During crisis and wartime situations, the brigade likely reports to the war front command, as discussed earlier in the chapter.

The unique brigade elements include a mobile brigade command post, a central depot (known as a "technical position" or *jishu zhendi*), a transfer point (*zhuanzai changping*), and an assigned set of pre-surveyed launch sites (*fashe zhendi*), as well as a set of reserve (*daiji*) launch sites. A conventional missile brigade also has a set of "equipment assurance sub-units" (*zhuangbei baozhang fendui*).¹¹⁹⁹ Brigades have at least four firing battalions (*fasheyings*), with each battalion assigned at least three-four companies.¹²⁰⁰ Companies subordinate to the launch battalion likely would be assigned at least one launcher, an electric power generation vehicle (*fadianche*), a surveying vehicle (*cekongche*), a communications command vehicle (*tongxun zhihuiche*), and a

¹¹⁹⁸ Senior Colonel Wang Benzhi, "*Didi changui daodan huoli yunyong de jige wenti* [Some Questions Related to the Use of Conventional Surface-to-Surface Missile Firepower]," in *Lianhe zhanyi yu junbingzhong zuozhan* [Joint Theater and Service Operations], Beijing: National Defense University Press, 1998, pp. 236-241. Senior Colonel Wang is the Chief of Staff of the Second Artillery Huaihua Base (80305 Unit). One source states that an operational zone could be 20-40 square kilometers. It is unclear what echelon would operate in this size zone. See Lu Xiaohong, "*Daodan jidong fashe zhuangbei ji dimian shebei weizhuang yu yinshen jishu fenxi* [Analysis of Mobile Missile Launch and Ground Equipment Camouflage and Stealth Technology]," in Xu Dazhe, *Guowai dandao daodan jishu yanjiu yu fazhan* [Study and Development of Foreign Ballistic Missile Technology], Beijing: Astronautics Press, October 1998, pp. 193-202.

¹¹⁹⁹ *Ibid.*, p. 4. The equipment assurance sub-units, the transfer point, and the transport may be the responsibility of a battalion-level "technical unit" (*jishu ying*). A nuclear brigade's technical battalion manages a warhead station (*dantizhan*), an inspection station (*zhuangjianzhan*), and a technical service station (*jishu qinwuzhan*). See "Glorious Honor Roll," p. 11.

¹²⁰⁰ For reference to a fourth battalion within a Second Artillery brigade structure, p. 10.

missile transport vehicle (*daodan yunshuche*). Battalions and companies would be assigned a zone within which to operate.¹²⁰¹

Academies and Schools (*xueyuan/xuexiao*)

Within the Second Artillery, three senior professional military education institutions can be identified. The Second Artillery Command College (*Erpao zhihui xueyuan*) in Wuhan prepares officers for leadership positions within headquarters elements and launch brigades. The Second Artillery Engineering College (*Erpao gongcheng xueyuan*) - Xi'an¹²⁰² educates technicians associated with equipment and technology departments at various headquarters and field units.

The Artillery Missile School (*Paobing daodan xueyuan*) brings together ground force and missile force officers, facilitating the deployment of ground-to-ground missiles such as the DF-11 Mod 1 with group armies.

Research Institutes (*yanjiusuo*)

The Second Artillery has one engineering design academy and four research institutes. The First Institute (*Dierpao diyisuo*) addresses problems associated with operations, TELs, and logistics, while the Second Institute (*Dierpao diersuo*) appears to have some interest in telecommunications.¹²⁰³ The Third Institute (*Dierpao disansuo*) conducts research on command automation, targeting, and mapping, and at least two researchers at the institute have written on deception issues in an internal volume.¹²⁰⁴ The precise focus of the Fourth Institute is unknown (*Dierpao disisuo*). The Engineering Design Research Institute (*Gongcheng sheji yanjiusuo*)¹²⁰⁵ was established in 1977, and performs engineering work on emplacements, command structures, barracks, and other

¹²⁰¹ Wang Benzhi, "Some Questions Related to the Use of Conventional Surface-to-Surface Missile Firepower," pp. 236-241; and Lu Xiaohong, "Analysis of Mobile Missile Launch and Ground Equipment Camouflage and Stealth Technology," pp. 193-202.

¹²⁰² Zhang Jiajun, "Zunshi zhongjiao xingcheng zhidu [Respecting Teachers and Effective Teaching Forms a System]," *Jiefangjun bao*, 9 September 1988.

¹²⁰³ Shi Qing, "Erpao yanzhi chu xinxing chengkong dianhua jiaohuanji [Second Artillery Corps' Research Has Produced a New Type of Computerized Switchboard]," *Jiefangjun bao*, 14 August 1988.

¹²⁰⁴ Yuan Zaijiang and Deng Mihui, Second Artillery 3rd Institute, "Junshi qipian jiqi dui zhanju de yingxiang [The Influence of War Conditions Upon Military Deception]," in *Wojun xinxizhan wenti yanjiu* [Our Military's Information Warfare Studies], Beijing: Guofang daxue chubanshe, 1999, pp. 155-157.

¹²⁰⁵ Zhang Jiajun, "Baochi zhiliang zuofeng, reqing wei budui fuwu [Maintain a Good Work Ethic and Enthusiastically Support the Army]," *Jiefangjun bao*, 20 February 1989.

support infrastructure.¹²⁰⁶ There is also some evidence that the institute, also known as the Academy of Engineering Design, is involved in missile and warhead engineering design.

SECOND ARTILLERY FORCE STRUCTURE

In the next two sections we take a careful look at China's nuclear force structure and hardware, draw inferences from this empirical data to clarify questions about China's doctrine and capabilities, and reach understandings about the Second Artillery's future strategic posture from the vantage point that means most for strategic policy: how does the posture of the Second Artillery actually affect the security balance in strategic, theater and conventional terms?

History

According to Chinese sources, the Chinese Missile Research Academy (also known as the Fifth Research Academy) was established in October 1956 under the direction of Qian Xuesen.¹²⁰⁷ Ten research institutions were set up under the Fifth Academy to focus on the development of China's ballistic missiles. China began "copy production" of its first ballistic missile – a Chinese copy of a Soviet R-2 missile – in October 1958, and the missile was first tested three times in November and December 1960. Since that time the exact number of missile tests is difficult to discern through open sources, but by the end of the 1960s, China had conducted at least 30 MRBM (the DF-2 and -2A missiles) tests at ranges of up to 1500 kilometers. Major milestones in China's nuclear force modernization are noted over the following pages.

DF-2 and -2A. After a failed flight test on 21 March 1962 – in which shortly after take off, the missile erratically flew with its engine on fire before crashing near the launch pad -- the Chinese successfully tested the DF-2 numerous times in June and July 1964 following the first success on 29 June 1964. Following a February 1965 decision to increase the range of the DF-2, an increase of 20 percent in the range was achieved for the DF-2A, beginning with its first successful tests in November 1965. On 27 October 1966, the Chinese launched a DF-2 with an armed, live nuclear warhead from the Shuangchengzi to an impact area in the Lop Nur testing area.¹²⁰⁸ The DF-2 series, with ranges of 1000 and 1250km respectively and a yield of 20Kt, was "sited in Northeast

¹²⁰⁶ Chen Dechun, "*Erpao gongcheng sheji yanjiusuo 10 nian we budui* [The Second Artillery Corps Engineering and Design Research Institute have Defrayed Engineering Costs by 50 Million Yuan in 10 Years]," *Jiefangjun bao*, 14 June 1987.

¹²⁰⁷ Unless otherwise noted, this section draws from Xie Guang, et al., eds., *Dangdai Zhongguo de guofang keji shiye* [Contemporary China's Defense Science and Technology Undertakings], vol. 1, Beijing: Dangdai Zhongguo chubanshe, 1992, chaps 8, 9, and 10.

¹²⁰⁸ Robert Norris, et al, *Nuclear Weapons Databook*, pp. 377-78.

China and targeted on cities and U.S. military bases in Japan.”¹²⁰⁹ China was believed to have produced a total of 100 missiles between 1965 and 1971¹²¹⁰, deploying approximately 50 missiles at one time.¹²¹¹ Retirement of the system reportedly began in 1979 and was completed by 1990.¹²¹²

DF-3/3A. The DF-3 was China’s first indigenously developed ballistic missile.¹²¹³ Official calls for an intermediate-range missile began in the summer 1964, with formal approval to commence the R&D process granted in May 1965. After the difficulties with the DF-2’s “volatile liquid oxygen fuel,” the DF-3 was reportedly the first of a series of Chinese missiles designed to utilize storable liquid fuels.¹²¹⁴ The more stable fuels were also meant to improve readiness, since the Cuban Missile Crisis had illustrated that missiles with non-storable fuels (such as the SS-3s and SS-4s on Cuba) were ineffective in international crises, since they took long to prepare for launch and could not be maintained at high alert levels for extended periods of time.¹²¹⁵ The missile was first successfully flight tested on 26 December 1966¹²¹⁶ though it was not until a third flight test in May 1967 that the Chinese were fully satisfied. It took several years for the missile to be deployed, though the exact deployment date is in dispute. The *IISS Military Balance* lists a 1970 deployment, while the *Nuclear Weapons Databook* asserts a May 1971 deployment.¹²¹⁷ The DF-3 was designed to carry a 2,150 kg warhead to a distance of 2,650 km (intended, when first conceived in the early 1960s, to hit U.S. military bases in the Philippines). Perhaps as many as 36 of these missiles were sold to Saudi Arabia in the late 1980s, as the slightly longer-range (2,850 km) DF-3A was

¹²⁰⁹ Lewis and Hua, *China Builds the Bomb*, p. 212.

¹²¹⁰ General Dynamics, *The World’s Missile Systems*, 8th ed., Pomona, CA: General Dynamics, August 1988, p. 52.

¹²¹¹ Joint Chiefs of Staff, United States Military Posture FY 1982, p. 109.

¹²¹² Lewis and Hua, “China’s Ballistic Missile Programs,” p. 9.

¹²¹³ Norris, et al., *Nuclear Weapons Databook*, p. 380. The DF-3 may have drawn in part from research and development conducted on the DF-1 which was originally based in part on the Soviet R-12 (NATO code name SS-4 or “Sandal”), which, like the DF-3, had a cluster of four engines, and which Chinese rocket scientists had learned about during training in Moscow in the 1950s. See Lewis and Hua, “China’s Ballistic Missile Programs”, p. 13.

¹²¹⁴ Jane’s Strategic Weapons Systems.

¹²¹⁵ Center for Defense Information, Nuclear Weapons Database: Chinese Arsenal.

¹²¹⁶ Lewis and Xue, *China Builds the Bomb*, p. 213.

¹²¹⁷ See Norris, et al., *Nuclear Weapons Databook*, p. 381; Lewis and Hua, “China’s Ballistic Missile Programs”, p. 16, also provides the May 1971 date.

tested in December 1985 and January 1986, and commissioned in that year to replace the DF-3.

DF-4. The Chinese intermediate-range ballistic missile (IRBM) DF-4 was a more difficult undertaking. With a required range of up to 4000 km ("to strike the B-52 base on the U.S. island of Guam"¹²¹⁸), the Chinese formally authorized development of the missile in May 1965. This was to be China's first two-stage rocket (using the DF-3 as the first stage), and required technical breakthroughs in such areas as engine reliability in the near-vacuum of the upper atmosphere, developing high-altitude test simulator beds, developing more heat-resistant materials, and improved guidance systems for the longer-range missile. The first flight test of the missile failed in November 1969 – the second stage was not ignited/separated and the missile self-destructed – but the missile was successfully tested in January 1970. According to Lewis and Hua, because of the Sino-Soviet Ussuri River clashes in late 1969, the range of the missile was subsequently raised to 4500 km (and eventually attained a 4750 km range) in order to reach Moscow.¹²¹⁹ According to Norris, et al., it "was initially planned to be deployed in silos but recognition of its vulnerability lead to reconsideration of rail-mobile basing."¹²²⁰ From 18 September to 2 October 1975, the Chinese conducted DF-4 rail-mobile tests over 8000km in ten provinces.¹²²¹ In 1977, the Chinese finally chose a deployment plan based on cave storage, whereby the missiles would be brought out of the cave for erecting, fueling, and firing.¹²²² A full-range test flight occurred on 2 August 1980.¹²²³

DF-5 and DF-5A. China formally began development of the intercontinental ballistic missile (ICBM) DF-5 in March 1965, and its progress was also delayed by the exigencies of the Cultural Revolution. A first flight test was conducted on 10 September 1971, though this test – entirely within Chinese territory -- had to be conducted across a shorter range and different trajectory than the missile was designed for. It was not until 18 May 1980 – a full fifteen years after the missile began development – that the Chinese could conduct a full-range flight test from the mainland into the Western Pacific. This test was followed by a second full range test on 21 May 1980.

Solid-fuel missiles. According to Chinese sources, work on solid fuel missiles in China date back as far as October 1956, when Qian Xuesen was first setting up the Fifth Research Academy.¹²²⁴ First strides were made by the late 1950s and early 1960s in

¹²¹⁸ Lewis and Hua, "China's Ballistic Missile Programs", p. 17.

¹²¹⁹ Ibid.

¹²²⁰ Norris, et al., *Nuclear Weapons Databook*, p. 383.

¹²²¹ Lewis and Hua, "China's Ballistic Missile Programs," p. 24.

¹²²² Norris, et al., *Nuclear Weapons Databook*, p. 383.

¹²²³ Ibid., p. 382.

¹²²⁴ This section draws from "China's Solid Propellant ICBM Research," in *Dangdai Zhongguo de guofang keji shiye*.

developing and testing prototype solid propellant. Static tests were made with 300mm diameter engines in 1965 and on 1400 mm diameter engines in December 1966.

Initially work was conducted with the intention of using solid fuels for a single-stage rocket. But, deeming such missiles' ranges as too short, in March 1967 Chinese military-technical authorities decided to go forward in the development of two-stage, "medium range" solid fuel surface to surface strategic missiles, to be mated with the ongoing nuclear submarine under development (the submarine-based missile was later to evolve into the DF-21 land-based system). However, again owing to the exigencies of the Cultural Revolution, Chinese sources note that serious work on the solid-fuel missile program did not begin until August 1978.¹²²⁵ However, it was not until launch equipment tests in April and May 1984, followed by launch tests in May 1985 (DF-21) and May 1987 (DF-21A), that these systems became fully operational in the early 1990s. This culminated a nearly 30-year development effort.

Another version of the DF-21, the submarine-launched JL-1, was first tested from a submerged conventionally-powered Golf-class submarine on 7 October 1982, but this launch failed as the missile lost control soon after ignition and self-destructed. On 12 October 1982 the missile was successfully launched from the submerged Golf submarine. As for launching from China's nuclear-powered submarine, the missile failed its first test on 28 September 1985, again turning over and self-destructing. It was not until three years later, on 15 September 1988, that a fully successful JL-1 launch took place from the submerged Xia-class nuclear submarine; a second successful test was conducted on 27 September 1988, culminating a difficult 30-year development process for Chinese SLBMs dating back to the late 1950s. According to open sources, China has not since 1988 test launched its JL-1 from the Xia-class nuclear submarine.

By the early 1990s, China had also tested and began deployment of two short-range, nuclear-capable ballistic missiles, the DF-15 (CSS-6/M-9) and 300 kilometer-range DF-11 (CSS-X-7/M-11).¹²²⁶ Both missiles were originally developed for export and it was only after China pledged not to export these missiles that they were incorporated into the Second Artillery.¹²²⁷ The DF-15 has been operational since 1994,¹²²⁸ and was tested approximately 10 times as part of the missile exercises China

¹²²⁵ Lewis and Hua note that problems in warhead miniaturization, nuclear submarine development, and bureaucratic turf battles also slowed the program.

¹²²⁶ The nuclear capability of these missiles is cited in U.S. Department of Defense, "Selected Military Capabilities of the People's Republic of China," report to Congress pursuant to Section 1226 of the FY98 National Defense Authorization Act, October 1998.

¹²²⁷ The authors are indebted to Evan Medeiros for this point.

¹²²⁸ U.S. Department of Defense, "Selected Military Capabilities of the People's Republic of China," report to Congress pursuant to Section 1226 of the FY98 National Defense Authorization Act, October 1998.

conducted around the Taiwan Strait in July-August 1995 and March 1996.¹²²⁹ The CSS-X-7/M-11 was not believed to be deployed with Chinese forces as of October 1998,¹²³⁰ though some foreign sources familiar with the PLA believe that the 300km DF-11 has already been fielded by at least two PLA group armies.¹²³¹ The 1999 *DoD Report to Congress on the Security Situation in the Taiwan Strait* reported that an improved, longer-range version of the DF-11 might be under development,¹²³² a fact that was later verified by the 1 October 1999 military parade in Beijing.¹²³³

Testing. China's 32-year testing program is the smallest of the five major nuclear powers, with 45 tests between 1964 and 1996. By comparison, the United States tested more than 20 times as much, with over a thousand blasts over a more than 50-year program. This static examination of the total number of tests gives us evidence of comparative scale, but changes in annual averages can also signal intent. The amount of Chinese testing increased marginally after 1979 from 1.3 to 1.7 tests per year, but it is important to note that American testing between 1979 and 1992 averaged 13.6 detonations per year.

By previous standards, Chinese testing accelerated significantly in the mid-1990s, though this intensified program was likely linked to China's stated intention from early 1994, at the outset of CTBT negotiations, to conclude a test ban by the end of 1996. This timeline suggests that a political decision to sign the treaty in principle had been made by 1993 or earlier, and may have intensified in the face of increasing international condemnation of China's test program, which continued throughout the CTBT negotiation process.¹²³⁴ The pace of Chinese testing certainly intensified over the

¹²²⁹ On the 1995 and 1996 Taiwan Strait missile tests, see "China Announces Missile Launch Testing," *Executive News Service*, 19 July 1995; and "Taiwan Detects Chinese Missiles," *Executive News Service*, 8 March 1996.

¹²³⁰ U.S. Department of Defense, "Selected Military Capabilities of the People's Republic of China," report to Congress pursuant to Section 1226 of the FY98 National Defense Authorization Act, October 1998.

¹²³¹ Reported in Mark Stokes, "PLA Strategic Warfighting in the 21st Century: Space and Theater Missile Development," (paper presented at the Conference on the People's Liberation Army, 10-12 September 1999, U.S. Army War College, Carlisle Barracks, Pennsylvania).

¹²³² 1999 DoD Report to Congress on the Security Situation in the Taiwan Strait, Washington, DC: Government Printing Office, 1999, p. 4.

¹²³³ See *Jane's Defense Weekly* coverage of the parade.

¹²³⁴ An informal testing moratorium among four of the nuclear weapon states – Soviet Union/Russia, the United States, France and the United Kingdom – had already been in place for several years. The Soviet Union's last test was in October 1990; the newly independent state of Russia has not since tested; the last U.S. test was in September 1992; the last U.K test was in November 1991. France had participated in the

period 1994-96. China's six tests over a twenty-five month period (June 1994-July 1996, which overlapped with the negotiations of the CTBT) more than doubled China's average testing pace. It was also the only time in Chinese history that nuclear weapons were tested twice in three successive years.¹²³⁵ Also, this period marked the only time in Chinese testing history that blasts occurred in either July or August – outside the typical Chinese testing “season” – which also indicates a sense of urgency within the military and nuclear scientific communities.¹²³⁶ Finally, it seems likely that the initial bargaining positions put forth by China – such as on verification and inspection procedures and leaving the door open to peaceful nuclear explosions – both offered the military the possibility of further testing, and may have succeeded in stalling the negotiation process to grant China's testing program more time. Almost immediately after China announced in early June 1996 that it would have one more test, it stepped away from its objections to the treaty allowing the negotiations to come to a conclusion.

The Cox Report strongly suggests that the combination of nuclear espionage and the intense series of underground tests described above has accelerated the PRC's attainment of advanced, MIRVable small warheads, but some important caveats must be offered. First and foremost, the warheads employed by U.S. nuclear forces are highly complicated devices that are extremely difficult to build. They are the product of decades of dedicated research and development, using some of the most advanced techniques available. As such, there are limits on the amount of benefit that can be wrought from simply obtaining the designs for these weapons.¹²³⁷ As one sober observer writes,

China's theft of the W-88 design used for the U.S. Navy's *Trident* missile warhead, for example, does not allow its engineers to reconstruct the thousands of parts and electronic components that form the completed weapon. Even the computer codes China may have obtained are mathematical models of the physical characteristics of a nuclear explosion. They cannot be used to design and manufacture a warhead. Chinese

moratorium for nearly four years, from late 1991 until late 1995, when it resumed its final series of six tests which ran from September 1995 to January 1996.

¹²³⁵ With 45 tests over a period of 381 months (October 1964 through July 1996), China averaged about 0.118 tests every month, or 2.95 tests on average for a 25-month period. Comparably intensive testing for China occurred over the period October 1975 to December 1978, when China tested nine times over a 38 month period, and four times in 1976 alone.

¹²³⁶ Thirty-two of China's 45 tests – more than 70 percent – took place in either May-June or September-October.

¹²³⁷ This line of argument is most credibly presented by Richard Garwin and Wolfgang Panofsky. See Richard L. Garwin, “Why China Won't Build U.S. Warheads,” *Arms Control Today*, April/May 1999, pp. 28-31; and Wolfgang K.H. Panofsky, “Assessing the Cost vs. Benefit of U.S.-Chinese Nuclear Cooperation,” *Arms Control Today*, April/May 1999, pp. 28-31.

engineers may well have obtained some useful information, but they lack the data and experience required to design and build replicas of sophisticated U.S. warheads from the stolen information.¹²³⁸

This line of reasoning is supported by the damage assessment by the intelligence community, which concluded that China had not deployed any operational system using the stolen designs, despite a lapse of more than 10 years since the alleged espionage.¹²³⁹ Passage of the CTBT could have locked this situation in place for the foreseeable future, though its defeat in the Senate should prepare us for the likelihood of a resumption of Chinese testing and thus the possible conquering of important developmental hurdles in the area of smaller warheads.

Current Force Structure

As a result of this historical progression, one of the most intriguing aspects of China's nuclear weapons program has been its quantitatively and qualitatively limited nature over time. These limitations are characterized in practice by a relatively small number of warheads, technically and numerically limited delivery vehicles, an overwhelming reliance on land-based systems, persistent concerns over the arsenal's survivability, reliability and penetrability, and a limited program of research, development and testing.

China's current nuclear weapons arsenal totals about 400 devices, 300 of which consist of warheads and gravity bombs for use on its strategic "triad" of land-based ballistic missiles, bomber and attack aircraft, and one nuclear-powered ballistic missile submarine (SSBN)(see Table 1).¹²⁴⁰ According to the U.S. Defense Department, over 100 warheads are deployed for use on China's ballistic missiles, with additional warheads in storage.¹²⁴¹ The Chinese SSBN is thought to deploy 12 single-warhead missiles. The remaining warheads reportedly consist of about 100 tactical nuclear weapons, including bombs for tactical bombardment, artillery shells, atomic demolition munitions, and

¹²³⁸ Paul Godwin, "China's Nuclear Forces: An Assessment," *Current History*, September 1999.

¹²³⁹ The Intelligence Community Damage Assessment on the Implications of China's Acquisition of U.S. Nuclear Weapons Information on the Development of Future Chinese Weapons, 21 April 1999.

¹²⁴⁰ See, for example, Robert S. Norris and William M. Arkin, "British, French, and Chinese Nuclear Forces," *Bulletin of the Atomic Scientists*, November/December 1996, p. 66; and Robert S. Norris and William M. Arkin, "Global Nuclear Stockpiles, 1945-1997," *Bulletin of the Atomic Scientists*, November/December 1997, p. 67.

¹²⁴¹ Office of the Secretary of Defense, *Proliferation: Threat and Response*, Washington, D.C.: U.S. Government Printing Office, November 1997, online version.

possibly short-range missiles.¹²⁴² China has the capability to increase the size of its nuclear arsenal using its existing stockpile of fissile material. One source indicates that China has an inventory of between two and six tons of plutonium and 15 to 25 tons of highly enriched uranium.¹²⁴³ Iain Johnston estimates that China has enough fissile material to double or triple its arsenal.¹²⁴⁴ However, according to the U.S. Defense Department, "China is not currently believed to be producing fissile material for nuclear weapons, but it has a stockpile of fissile material sufficient to increase or improve its weapon inventory."¹²⁴⁵

In addition to ballistic and cruise missiles, according to the U.S. Defense Department, "China also has a variety of fighters, bombers, helicopters, artillery, rockets, mortars, and sprayers available as potential means of delivery for NBC [nuclear, biological, and chemical] weapons."¹²⁴⁶ China is working to modernize its capabilities in terms of ballistic and cruise missiles, bombers, and multi-role aircraft, but relies upon deterrent systems and technologies which are at least 20 years behind the capabilities of the four major declared nuclear powers. According to Chinese sources, the overall capabilities of the strategic rocket forces have advanced in recent years owing to better, more modern training, the development of strategic missile simulator training, improvements in technical reconnaissance, weather forecasting, geographical surveying, anti-chemical warfare and logistics support, and the introduction of some "1000 technological research results."¹²⁴⁷ Estimates of Chinese nuclear-capable ballistic missile forces are shown in Table 1. Estimates vary as to the exact number of these missiles, but China benefits from a large, well-developed infrastructure for the development and production of ballistic missiles.

¹²⁴² Norris, et al., *Nuclear Weapons Databook*, pp. 370-371. Beijing has not acknowledged possession of tactical weapons. See Jonathan D. Pollack, "The Future of China's Nuclear Weapons Policy," in John C. Hopkins and Weixing Hu, eds., *Strategic Views from the Second Tier: The Nuclear Weapons Policies of France, Britain, and China*, New Brunswick: Transaction Publishers, 1995, p. 160.

¹²⁴³ David Albright, Frans Berkhout, and William Walker, *Plutonium and Highly Enriched Uranium 1996: World Inventories, Capabilities, and Policies*, New York: Oxford University Press, 1997, pp. 77, 129.

¹²⁴⁴ Johnston, "China's New 'Old Thinking'," p. 36.

¹²⁴⁵ Office of the Secretary of Defense, *Proliferation: Threat and Response* (online version).

¹²⁴⁶ Ibid.

¹²⁴⁷ *Xinhua*, 23 May 1996, in Foreign Broadcast Information Service, *Daily Report: China*, FBIS-CHI-96-105, 23 May 1996.

Table 11.1 Range of Estimates of Chinese Nuclear Weapon Delivery Vehicles

Delivery vehicle (Western designator)	Range (km)	Nuclear Weapons Databook (1994)	Military Balance (98-99)	Jane's Strategic Systems (9/98)	Various
<i>Land-based missiles</i>					
DF-3A (CSS-2)	2850	50	38+	60-80	40-80 ¹²⁴⁸
DF-4 (CSS-3)	4750	20	10+	20-35	10-20 ¹²⁴⁹
DF-5A (CSS-4)	13,000+	4	17	15-20	4-10 ¹²⁵⁰ , 20 ¹²⁵¹
DF-21A (CSS-5)	1800	36	8	35-50	25-50 ¹²⁵²
DF-15/M-9 (CSS-6)	600	N/A	4	400	160-200 ¹²⁵³
DF-11/M-11 (CSS-7)	300	N/A	N/A	200	
DF-11A (CSS-7 Mod 2)	300	N/A	N/A	N/A	32 ¹²⁵⁴
DF-31**	8000	0	0	0	0
DF-31A**	12,000	0	0	0	0
<i>Aircraft</i>					
H-6 (B-6/Tu-16)	3100	N/A	N/A	N/A	100-120
Q-5 (A-5/MiG-19)	400	N/A	N/A	N/A	100+
<i>SLBMs</i>					
JL-1 (CSS-N-3)	1700	24	12	12	12
JL-2 (CSS-N-4)**	8000	0	0	0	0

Notes:

** According to Stan Norris, a nuclear weapons expert in Washington, D.C., the DF-41 is now known as the DF-31A. The DF-31, DF-31A, and JL-2 are under

1248 Dunbar Lockwood, "The Status of U.S., Russian, and Chinese Nuclear Forces in Northeast Asia," *Arms Control Today*, November 1994, p. 24.

1249 Ibid.

1250 Ibid.

1251 National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," September 1999, p. 11.

1252 Lockwood, "The Status of U.S., Russian, and Chinese Nuclear Forces", p. 24.

1253 Department of Defense, "The Security Situation in the Taiwan Strait," Report to Congress Pursuant to the FY99 Appropriations Bill, 26 February 1999.

1254 Two future brigades of 16 launchers each was first reportedly in Bill Gertz, "China Points More Missiles at Taiwan; U.S., in Turn, Helps Island Boost Defenses," *Washington Times*, 23 November 1999, p. A1; and Bill Gertz, "Second Chinese Missile Base Detected Near Taiwan: Report," *Washington Times*, 8 December 1999, p. A1.

development, and are not expected to be in service until the early 2000s or later (DF-31 and JL-2) or until approximately 2010 (DF-31A); the DF-31 was flight-tested in August 1999 and a computer simulation on the DF-31A was reportedly conducted recently.

Sources: Adapted from Robert Norris, et al, *Nuclear Weapons Databook*, p. 377-78; *The Military Balance 1998/99*, London: Oxford University Press, October 1998, p. 178; *Jane's Strategic Systems*, September 1998; Robert S. Norris and William M. Arkin, "Appendix 11A. Tables of nuclear forces," in *SIPRI Yearbook 1997*, Oxford: Oxford University Press, 1997, Table 11A.5, p. 401; and National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," September 1999.

From Table 11.1, it is clear that the Chinese nuclear force structure is primarily land-based, relying on a range of missile systems. On the short-range end of the land-based missile spectrum, China reportedly possesses several hundred DF-11s and DF-15s, which have ranges of 300km and 600km, respectively. The DF-15 can deliver a 500-kilogram payload to a maximum range of 600 kilometers, with a CEP of 600m.¹²⁵⁵ The DF-11 reportedly has an 800kg warhead and a 150m CEP.¹²⁵⁶

In the medium- to -intermediate range inventory, the PRC fields three types of missiles (DF-3A, DF-4, and DF-21). Deployed in caves and valleys to increase its survivability, China's liquid-fueled DF-3As have a range of 2800km and reportedly carry a single warhead with an estimated yield of 1-3 megatons.¹²⁵⁷ The liquid-fueled DF-4s, with a range of 4850-5500 kilometers, are deployed in silos and tunnels and have a single warhead with an estimated yield of 1-3 megatons.¹²⁵⁸ The solid-fueled, mobile DF-21As have a range of 1800km and a 600kg warhead with a yield of 200-300Kt.¹²⁵⁹

In the ICBM category, China's DF-5 ICBMs can reach targets in all of the United States.¹²⁶⁰ Each silo-based missile carries a single warhead, with an estimated yield of 3-5 megatons.¹²⁶¹

In its weaker second leg of the triad, China has deployed 12 single-warhead JL-1s, a submarine-launched ballistic missile (SLBM) with a range of 1700 kilometers aboard

¹²⁵⁵ We suspect that the CEP of the DF-15 is now much lower than 600m. Lower estimates of the DF-15's CEP have been discussed in the Hong Kong and Taiwan media, but 600m is the only verifiable number in open sources.

¹²⁵⁶ Stokes, "PLA Strategic Warfighting," pp. 10-11.

¹²⁵⁷ Lockwood, "The Status of U.S., Russian, and Chinese Nuclear Forces", p. 24.

¹²⁵⁸ Ibid.

¹²⁵⁹ Ibid.

¹²⁶⁰ National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," September 1999, p. 11.

¹²⁶¹ Lockwood, "The Status of U.S., Russian, and Chinese Nuclear Forces", p. 24.

its one *Xia*-class nuclear submarine.¹²⁶² These missiles have faced operational difficulties, and it was not until 1988 that they were first test-launched successfully from the *Xia*-class submarine. According to Paul Godwin, "this troubled ship has spent most of its time docked or in local waters and is not considered operational."¹²⁶³ The limited range of the missile, the problems it has had in deployment and operation, and the limited experience of the Chinese in long-range submarine operations limits the value of this system as a strategic weapon. Beijing may also have learned some valuable negative lessons from the experience of the Soviet Union, whose SSBN force was forced to retreat to bastions by a superior U.S. attack submarine fleet.

China's bomber and ground-attack fleet is made up of two aircraft, both of which are based on 1950s Soviet designs: the *Hong-6* (H-6) bomber (Soviet Tu-16 design) and the *Qian-5* (Q-5) ground attack aircraft (a redesign of Soviet MiG-19). Given the nascent state of China's in-flight refueling capability, the maximum ranges of these aircraft are approximately 3,000 and 800 kilometers, respectively. China reportedly halted production of the H-6 in 1982, and now deploys between 100 and 120 H-6s (some in a nuclear role). China deploys over 400 Q-5 aircraft (perhaps 30 currently in nuclear role).¹²⁶⁴

Towards An Organic View of Chinese Nuclear Force Structure

Viewed as an organic whole, the Chinese nuclear force structure defies simple categorization as either a limited or minimal deterrent. Instead, the multi-faceted force is made up of strategic, theater, and tactical systems of varying range, accuracy, and yield. The small ICBM force, anchored by the DF-5 family of missiles, appear to be second-strike minimal deterrence forces. The theater systems are unlikely to be used in a second-

¹²⁶² There is a discrepancy among analysts as to how many *Xia* class submarines China has. Some analysts state that China has two such vessels. The Jane's Information Group, however, notes that "To maintain one submarine on continuous patrol takes a minimum of three, and, to be absolutely safe, and optimum number of five hulls. Because of this known requirement, there has been a tendency in the West to exaggerate the Chinese [nuclear-powered ballistic missile submarine] programme, both in terms of numbers and timescales". Richard Sharpe, ed., *Jane's Fighting Ships 1994-95*, Coulsdon, Surrey: Jane's Information Group, 1994, p. 114.

¹²⁶³ Godwin, "China's Nuclear Forces".

¹²⁶⁴ *The Military Balance 1997/98*, London: Oxford University Press, October 1997, p. 178; Robert S. Norris and William M. Arkin, "Appendix 11A. Tables of nuclear forces," p. 401. According to the *Military Balance*, China still deploys over 200 of the older H-5 bombers in a conventional role. For information on Chinese military aircraft production, see Randall Forsberg, ed., *International Fighter Study*, Cambridge, Mass.: Institute for Defense and Disarmament Studies, January 1994, Table 3.5; and Kenneth W. Allen, Glenn Krumel, and Jonathan D. Pollack, *China's Air Force Enters the 21st Century*, Santa Monica, California: RAND, 1995.

strike, minimal deterrent role following a preemptive strike. Instead, theater systems look like offensive systems meant to strike U.S. forces and bases in Asia to degrade conventional capability. The short-range, ballistic missile forces, which are also nuclear capable, further confuse the situation by serving a variety of conventional warfighting and nuclear warfighting roles. Perhaps the best way to understand the nature of this multi-function force structure is to deductively infer the purpose of each element in the force by examining range and deployments, payloads and CEP, readiness, and C4I structure.

Ranges, Deployments, and Targets. The Chinese nuclear force inventory encompasses a wide variety of ranges, and the deployment of these forces offer a wide variety of potential targets. The basing of China's missiles is summarized in Table 11.2 below.

Table 11.2 Suspected Chinese Strategic Missile Bases (derived from open sources)

Base #	Base MUCD	Base and Selected Brigade Locations	Reported Missile Types
51 Base	80301	<i>Headquarters:</i> Shenyang, Jilin Province <i>Brigades:</i> Tonghua (DF-3A and DF-21), Dengshahe (DF-3A)	DF-3A (CSS-2) DF-21 (CSS-5)
52 Base	80302	<i>Headquarters:</i> Huangshan (Tunxi), Anhui Province <i>Brigades:</i> Leping (DF-15), Lianxiwang (DF-3A), Yongan (DF-11A), Xianyou (DF-11A)	DF-15 (CSS-6) DF-3A (CSS-2) DF-11A (CSS-7 Mod 2)
53 Base	80303	<i>Headquarters:</i> Kunming, Yunnan Province <i>Brigades:</i> Chuxiong (DF-21), Jianshui (DF-3A)	DF-3A (CSS-2) DF-21 (CSS-5)
54 Base	80304	<i>Headquarters:</i> Luoyang, Henan Province <i>Brigades:</i> Luoning (DF-5), Sundian (DF-4)	DF-4 (CSS-3) DF-5 (CSS-4)
55 Base	80305	<i>Headquarters:</i> Huaihua, Hunan Province <i>Brigades:</i> Tongdao (2	DF-4 (CSS-3)

		brigades of DF-4)	
56 Base	80306	<i>Headquarters:</i> Xining, Qinghai Province <i>Brigades:</i> Datong (DF-3A), Delingha (DF-4), Da Qaidam (DF-4), Liujihou (DF-3A) ¹²⁶⁵	DF-3A (CSS-2) DF-4 (CSS-3)
N/A	80310	<i>Headquarters:</i> Baoji, Shanxi Province	Warhead storage facility
N/A	N/A	<i>Headquarters:</i> Yidu, Hubei or Shandong Province	DF-3A (CSS-2)

Note: In addition, reports also cite the following launch sites:
DF-5: Jiuquan (war reserves), Wuzhai (war reserves)

Sources: Mark A. Stokes, *China's Strategic Modernization: Implications for U.S. National Security*, Maxwell, AL: Air Force Institute for National Security Studies, October 1997; Leonard S. Spector, Mark G. McDonough, with Evan S. Medeiros, *Tracking Nuclear Proliferation: A Guide in Maps and Charts*, Washington, D.C.: Carnegie Endowment for International Peace, 1995, pp. 52-56; Bill Gertz, "New Chinese missiles target all of East Asia," *Washington Times*, 10 July 1997, p. A1; Bill Gertz, "China Points More Missiles at Taiwan; U.S., in Turn, Helps Island Boost Defenses," p. A1; and Bill Gertz, "Second Chinese Missile Base Detected Near Taiwan: Report," p. A1. The MUCDs have been collected from open sources, including assorted *neibu* Second Artillery publications.

From the locations of these bases and the ranges of their deployed missiles, several inferences can be drawn about the likely target for these missiles. The DF-3As and DF-21s of Base 80301 are likely targeted on Japan, Korea, Okinawa, or the Russian Far East. The DF-15s of Base 80302 are almost certainly aimed at Taiwan. The DF-3As and DF-21s of Base 80303 are likely targeted against countries south and southwest of China, including the Philippines, Vietnam, and India. The DF-5s of Base 80304 are the major CONUS-oriented systems, while the DF-4s of both Base 80304 and Base 80305 might be aimed at Hawaii. Finally, it seems likely that the DF-3As and DF-4s of Base 80306 are targeted at sites in the former Soviet Union, including Moscow, or possibly also India.

How did the structure evolve to this arrangement? Lewis and Hua maintain that China's nuclear weapons program "proceeded without such strategic guidance" and that "until the early 1980s, there were no scenarios, no detailed linkage of the weapons to

¹²⁶⁵ The Liujihou brigade was not listed with the other brigades of Base 80306, but its proximity to Qinghai suggests that it should be part of this base.

foreign policy objectives, and no serious strategic research.”¹²⁶⁶ They even go so far as to say that neither the “Chinese leader nor his senior colleagues on the Central Military Commission considered, communicated, or authorized the investigation of the broader strategic purposes of the program.”¹²⁶⁷ As Lewis and Hua predicted, we have difficulty believing this to be true. From an examination of the sources of their collected works, no one can doubt the authors’ access to critical personnel or documents from China’s nuclear programs or missile programs, though the level of citation from central leadership documents is considerably lower. While we doubt that the first generation of leaders, especially Mao, understood the scientific or technical aspects of nuclear combat, they were at least able to articulate the strategic targets for these weapons and task the weapons complex accordingly. Indeed, the authors seem to contradict themselves when they relate stories wherein researchers are told the specifications for specific missiles (i.e., range, payload, etc...) by central authorities, who then later change the range and payload requirements for individual missiles to reflect new strategic goals. For example, they assert that the military commission in 1970 commanded that the range of the DF-4 be increased from 4,000km to 4,500km, “bringing Moscow within range of bases in Da Qaidam, Qinghai Province.”¹²⁶⁸ This story, along with others in the narrative about the sequential development of missiles capable of hitting the Philippines, Guam, Hawaii, and the U.S., suggest that someone, somewhere at a central level was making decisions about the strategic purpose and direction of various missile systems, which was then reflected in the seemingly logical pattern (defined as matching geographic location with range to target) of base and missile deployments.

One important dilemma that confronts any analyst trying to understand the overall nature of the Chinese nuclear force posture is reconciling the mixture of strategic and theater systems with claims of either minimal or limited deterrence. However, comparative cases of nuclear force structure evolution offer clues about China’s intentions. In the Soviet case, it is important to note that Moscow did not draw a sharp distinction between their strategic and theater nuclear weapons systems. The best example of this was the road-mobile SS-20, which was developed to de-couple the U.S. from its allies in Europe and Asia by holding theater targets at risk and preventing Washington from defending allies. The Soviets referred to this combination of strategic and theater nuclear weapons as the “seamless web of deterrence.” Is the same thing happening in China? Clearly, China and the former Soviet Union share some commonalities in their strategic environment and goals. Like the Soviets, China seeks to de-couple the U.S. from its allies in the region, especially Japan and Korea, by using the threat of theater nuclear weapons. In recent years, this threat has become particularly important in a Sino-U.S. conflict over Taiwan, which could escalate to the point where it threatens to split the U.S.-Japan defense alliance. However, the United States withdrew its theater nuclear forces in 1991. How has this changed the rationale for the DF-21A and

¹²⁶⁶ Lewis and Hua, “China’s Ballistic Missile Programs”, pp. 6-7.

¹²⁶⁷ *Ibid.*, p. 6.

¹²⁶⁸ *Ibid.*, p. 17.

other Chinese theater nuclear forces, since they no longer have a second-strike role?¹²⁶⁹ To explicate this situation, a deconstruction of the Chinese force is required.

Payloads, CEP, and Targeting. Until the DF-31 comes online, the Chinese strategic nuclear forces is dominated by missiles with high yield warheads and large CEPs. For example, the DF-4 ICBM has an estimated yield of 1-3 megatons and a CEP of almost a mile.¹²⁷⁰ The mainstay of the Chinese ICBM force, the DF-5, is more accurate, but still has a yield of 3-5 megatons and a CEP of more than a quarter-mile. This combination of high yield with low accuracy suggests that the force is designed for countervalue, or "city-busting" attacks against "soft" targets such as concentrated population centers, and other locations of political and economic value.¹²⁷¹ Counterforce warfighting, by contrast, requires far more accuracy than offered by these systems.

Readiness and Survivability. In the past, the limited numbers, low level of readiness, and slow response times of China's land-based missiles and bombers left China vulnerable to an overwhelming and incapacitating first-strike. China does not currently have space-based or land-based early warning assets. A senior U.S. intelligence official has confirmed that Chinese missiles are usually unfueled and unmated to their warheads.¹²⁷² Furthermore, the process of loading the liquid fuel tanks and installing the warheads can take two to four hours.¹²⁷³ Because of the lengthy pre-launch exposure times of more than 2 hours for the DF-3A, decisions were taken which led eventually to

¹²⁶⁹ Of course, it must be recognized that the Chinese may not believe the 1991 withdrawal took place.

¹²⁷⁰ Claire Hollingsworth, "China's Growing Missile Might," *Defense and Foreign Affairs*, March 1985, p. 28.

¹²⁷¹ See, for example, Institute for National Strategic Studies, *Strategic Assessment 1997*, Washington, D.C.: National Defense University, 1997, p. 50; Godwin and Schulz, "Arming The Dragon," p. 6; and Xue, "Evolution of China's Nuclear Strategy," pp. 173-76.

¹²⁷² Robert Walpole, National Intelligence Officer for Strategic and Nuclear Programs, briefing to Carnegie Endowment for International Peace, 17 September 1998. In discussing command and control concepts, a Chinese source writes: "The most crucial aspect of preventing a nuclear accident [*yiwai shigu*] is to take the utmost care in designing safeguard measures when developing nuclear weapons. ... [S]imply separating the nuclear parts from the other parts and storing them separately is actually the best safeguard measure against a nuclear accident." See Liu Zhenwu, ed., *Xiandai jundui Zhihui* [Modern Military Command and Control], 2nd ed., Beijing: National Defense University Press, 1994, pp. 395-96.

¹²⁷³ Godwin, "China's Nuclear Forces."

operating the DF-4 from caves and the DF-5 from silos.¹²⁷⁴ While cave- and silo-basing reduces pre-launch exposure, the basing mode could not significantly reduce the overall preparation time for launch, including fuelling, arming, positioning (in case of non-silo-basing), targeting and range-setting, and other preparatory checks.¹²⁷⁵ Given these time-constraints, the Chinese DF-3A, DF-4, and DF-5A in today's arsenal may still take from 1 to 2 hours to launch. From this incomplete data, we tentatively infer that the Chinese nuclear force is incapable of launch-on-warning or launch-under-attack. This readiness and survivability level is consistent with a minimal deterrent posture

China has also sought to improve survivability by establishing a credible triad. As early as the mid-1950s, China began developing a sea-based deterrent, though this small program continues to face a number of serious technological obstacles.¹²⁷⁶ China has held only one known SLBM test from the *Xia*-class submarine, and the existence of only a single boat obviates the possibility of regular patrolling.¹²⁷⁷ Efforts to further integrate Chinese bombers into the triad have been impeded by the vulnerability of PRC airfields and the high cost of modern aircraft capable of penetrating advanced air defenses.¹²⁷⁸ In addition, Chinese nuclear-capable bombers are limited in range and are highly vulnerable to sophisticated air defenses, making it unlikely that the bomber force would be effective in a nuclear delivery role against either Russia or U.S. forces in the Western Pacific region.¹²⁷⁹ Despite strenuous efforts, therefore, the sea-based and bomber-based legs of China's triad are still relatively unreliable, especially in the context of intercontinental nuclear combat with the United States. As a result, China has been forced to focus on ensuring the survivability of its land forces by deploying road-mobile, solid-fuel systems.

¹²⁷⁴ On 23 October 1978, the DF-3 was able to achieve a response time of 2 hours, 32 minutes. See Lewis and Hua, "China's Ballistic Missile Programs", pp. 22-24.

¹²⁷⁵ Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, Washington, DC: U.S. Government Printing Office, 1999, p. 192 (hereafter Cox Report), citing testimony by Robert Walpole, states that "the intercontinental CSS-4s [DF-5s] are deployed in their silos without warheads and without propellants during day-to-day operations."

¹²⁷⁶ Lewis and Xue, *China's Strategic Seapower*.

¹²⁷⁷ Estimates vary as to the minimum number of submarines necessary for sustained patrolling, ranging from 4-6 hulls.

¹²⁷⁸ Harlan Jencks, "PRC Nuclear and Space Programs," in Richard H. Yang, ed., *SCPS Yearbook on PLA Affairs 1987*, Kaohsiung, Taiwan: Sun Yat-sen Center for Policy Studies, National Sun Yat-sen University, 1987, p. 110.

¹²⁷⁹ Robert G. Sutter, *Chinese Nuclear Weapons and Arms Control Policies: Implications and Options for the United States*, CRS Report 94-422S, Washington, D.C.: Congressional Research Service, 25 March 1994, p. 7.

C4I Structure. The Second Artillery is tasked with implementing the reliable and secure command and control of China's nuclear and conventional missile forces.¹²⁸⁰ The Second Artillery was formally established in 1966, based upon a "special" artillery corps formed in 1958 following the Chinese decision to develop nuclear weapons. The Second Artillery is a separate service arm, distinct from the army, navy, and air force. The central command and control center for all Chinese forces, including SAC, is located in Xishan, in the hills west of Beijing, where strategic operational orders originate. Direct communication with China's six launch bases would be passed through the SAC headquarters and its communications regiment. It is important to note that this system bypasses China's military region commands, and connects directly to base commands. Base commands in turn communicate with their respective launch brigades. The SAC reportedly operates about six launch bases each led by a major general. Each base has two to three missile brigades each commanded by a colonel, with each brigade operating one type of missile. These brigades consist of up to four launch battalions (see Table 2).

At a political level, ultimate authority to use nuclear weapons is "subject to the unified command of the Central Military Commission. Only the commission's chairman [currently Jiang Zemin, who is also head of the Chinese Communist Party and the Chinese President] has the power to issue an order to use such weapons after top leaders reach a consensus on the issue."¹²⁸¹ However, it is likely that such a decision would require a consensus decision within the Central Military Commission and other senior military elders.¹²⁸² In wartime, a "skip echelon" system would be in effect, with the central command communicating directly with launch bases. According to at least one Chinese author, at the launch command level, two individuals must independently check a launch order, cross-confirm each other's order, and both must agree to launch.¹²⁸³

As for the technical aspects of Chinese nuclear C4I, little is available in open sources as to the precise systems employed to assure safe and reliable communication between the central leadership and the launch bases. However, increasingly in recent years, reports have surfaced in the open literature describing various new technologies and systems that help strengthen China's command and control system. In some cases the "breakthroughs" reported suggest that the past level of command and control structures was not particularly advanced. For example, the official People's Liberation Army Daily in early 1998 noted that the SAC "after three years of arduous work" developed a new digital microwave communications system which now allows for a

¹²⁸⁰ This section relies in part on Mark A. Stokes, *China's Strategic Modernization*, especially the section on the Second Artillery.

¹²⁸¹ Xue, "Evolution of China's Nuclear Strategy", p. 180; and Lewis and Xue, *China's Strategic Seapower*, p. 325, fn. 31.

¹²⁸² For an excellent analysis of Chinese command and control of its military forces, see Michael Swaine, *The Military and Political Succession in China: Leadership, Institutions, Beliefs*, Santa Monica, Calif.: RAND, R-4254-AF, 1992, pp. 119-39.

¹²⁸³ Liu Zhenwu, *Xiandai jundui zhihui*, p. 395.

secure "all-weather" communications for missile launch. "With the new system" the article notes, "the Second Artillery will no longer be affected by natural conditions such as weather."¹²⁸⁴

At the same time, however, the Pentagon reports that "China has made significant efforts to modernize and improve its command, control, communications, computers, and intelligence infrastructure."¹²⁸⁵ Given the importance of nuclear weapons to Chinese security, we assume that similar advances in C4I modernization have occurred in the strategic rocket forces. There is some evidence, for instance, that the Second Artillery seeks to connect much of its infrastructure with secure, landline fiber-optic cable.¹²⁸⁶ Moreover, open source reports detail the deployment of an "automated command and control system."¹²⁸⁷ From these changes, we can infer desire for greater survivability and positive control of nuclear weapons. They probably also reflect a greater desire for operational security, as well as enhanced denial and deception against other countries' increasingly advanced national technical means.¹²⁸⁸ By itself, however, the modernization of Chinese nuclear C4I does not automatically imply that the force is transitioning to a flexible response, counterforce footing. The changes might signal desire for eventual launch under attack (LUA) capability, but the current inventory of missiles and the next generation of replacements are not capable of the reaction times necessary for such a capability. Instead, it is more likely that the C4I modernization program is meant to improve the credibility of China's minimal deterrent posture in the short- to medium-term.

¹²⁸⁴ "Daodan shixian 'quantianhou' tongxin baozhang [Missile Launch 'All-Weather' Communications Guaranteed]," *Jiefangjun bao*, 5 January 1998, p. 2.

¹²⁸⁵ U.S. Department of Defense, "Selected Military Capabilities of the People's Republic of China," report to Congress pursuant to Section 1305 of the FY97 National Defense Authorization Act, April 1997.

¹²⁸⁶ Ge Xinqing, Mao Guanghong, and Yu Bo, "Xinxizhanzhong daodan budui mianlin de wenti yu duice [Questions and Answers Facing Missile Units in Information Warfare]," in *Junshi xueshu*, ed., *Wojun xinxizhan wenti yanjiu*, pp.189-192.

¹²⁸⁷ Han Tiejun and Li Qinsuo, "Didi changdui daodan budui zuozhan de jiben yuance [Fundamental Principles of Conventional Surface-to-Surface Missile Unit Operations]," in *Lianhe zhanyi yu junbingzhong zuozhan*, pp. 232-235.

¹²⁸⁸ For a detailed Chinese discussion of the need for more advanced and survivable nuclear weapons command, control, and communication, see Lin Zhenwu, ed., *Xiandai jundui zhihui*, pp. 393-416.

Future Nuclear Posture

Doctrine. Over the past decade, certain indicators suggest that these long-held aspects of Chinese nuclear weapons doctrine may be undergoing some reconsideration.¹²⁸⁹ As Paul Godwin argues,

Minimum deterrence, which uses a single countervalue punitive strike on cities to deter, is seen by many Chinese strategists as passive and incompatible with what they see as a future requirement for more flexible nuclear responses.¹²⁹⁰

Recent reports suggest a high-level, ongoing debate over the future of Chinese strategic forces. Out of this debate has come Jiang Zemin's statement of "five musts" which provide ample flexibility and nuance to guide the Second Artillery toward a more complex, capable and forward-leaning force in the future. Jiang is quoted as saying the "five musts" are: (1) China "must own strategic nuclear weapons of a definite quality and quantity in order to ensure national security; (2) China "must guarantee the safety of strategic nuclear bases against the loss of combat effectiveness from attacks and destruction by hostile countries"; (3) China "must ensure that our strategic nuclear weapons are at a *high degree of war preparedness*"; (4) "when an aggressor *launches* a nuclear attack against us, we must be able to *launch nuclear counterattack and nuclear re-attack* against the aggressor"; (5) China "must pay attention to the global situation of strategic balance and stability, and, when there are changes in the situation, *adjust our strategic nuclear weapon development strategy* in a timely manner."¹²⁹¹

As a result, one observer argues that some Chinese military planners are considering a shift to a "limited" deterrent posture, which could include the introduction of limited war-fighting capabilities, improved command and control and early warning systems, smaller, survivable, mobile, more accurate, and diverse cruise and ballistic missile nuclear delivery systems, possible abandonment of the NFU policy, missile defenses, and the addition of counterforce targets.¹²⁹² This view has gained backing in other detailed research which notes that "China's strategic modernization R&D [research and development] support this shift toward a limited warfighting approach to nuclear

¹²⁸⁹ For a Chinese perspective on this issue, see Yang Huan, "China's Strategic Nuclear Weapons," in Michael Pillsbury, ed., *Chinese Views of Future Warfare*, Washington, DC: National Defense University Press, 1997, pp. 131-135.

¹²⁹⁰ Godwin, "China's Nuclear Forces."

¹²⁹¹ From "Jiang Zemin Defines Position of China's Strategic Nuclear Weapons", in *Tai yang pao* [Hong Kong], 17 July 2000, in FBIS CPP20000717000021 (emphasis added).

¹²⁹² Johnston, "China's New 'Old Thinking'."

warfare.”¹²⁹³ Such a capability would allow China to respond to “any level of nuclear attack, from tactical to strategic.”¹²⁹⁴

However, as the previous pages suggest, from a strictly doctrinal perspective, it is likely that such a shift must await shifts in the domestic political hierarchy and its view of the outside world, factors which have consistently driven Chinese doctrinal choices. Moreover, as noted in the previous section on force structure, technological constraints will remain one of the foremost drivers determining the direction of doctrine in the near-term.

Rather than force a stark analytical choice between *either* a doctrine of “minimal deterrence” *or* one of “limited deterrence”, it makes more sense to draw out two important nuances to better understand this debate. First is to recognize the differences between “operational doctrine” and what we might call “aspirational doctrine” in the Chinese context. Second is to recognize that the Second Artillery – which oversees strategic nuclear, theater nuclear, and conventional missiles – more likely operates on three levels of doctrine: *credible minimal deterrence* with regard to the continental United States and Russia; *“limited deterrence”* with regard to China’s theater nuclear forces; and an *offensively-configured, preemptive, counterforce warfighting posture* of “active defense” or “offensive defense” for the Second Artillery’s conventional missile forces.

Force Structure. Various governmental reports suggest that Chinese nuclear force structure will increase in numbers and quality. In 1995, then-Secretary of Defense William Perry stated that China “has the potential to increase the size and capability of its strategic nuclear arsenal significantly over the next decade.”¹²⁹⁵ According to the U.S. Department of Defense in 1997, “China probably will have the industrial capacity, though not necessarily the intent, to produce a large number, perhaps as many as a thousand, new missiles within the next decade.”¹²⁹⁶ General Hughes, then Director of the DIA, testified in 1999 that “the number of Chinese strategic missiles capable of hitting the United States will increase significantly during the next two decades.”¹²⁹⁷ Publicly released estimates of the number of ICBMs capable of reaching the U.S. range from “tens”¹²⁹⁸ to the Cox

¹²⁹³ Mark A. Stokes, *China’s Strategic Modernization*, p. 96.

¹²⁹⁴ Godwin, “China’s Nuclear Forces.”

¹²⁹⁵ Secretary of Defense William Perry, *Annual Report to the President and the Congress*, Washington, DC: Government Printing Office, 1995, p. 83.

¹²⁹⁶ U.S. Department of Defense, “Selected Military Capabilities of the People’s Republic of China,” report to Congress pursuant to Section 1305 of the FY97 National Defense Authorization Act, April 1997.

¹²⁹⁷ General Patrick M. Hughes, Director of the Defense Intelligence Agency, Senate Armed Services Committee hearings on “Current and Projected National Security Threats,” 2 February 1999.

¹²⁹⁸ National Intelligence Council, “Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015,” p. 11.

Committee's ambitious estimates of "up to 100" ICBMs with 1000 MIRVed warheads by 2015.¹²⁹⁹ According to the Pentagon, "China plans to begin production and deployment of at least one solid-propellant ICBM that will provide China's strategic nuclear forces [with] improved mobility, survivability, accuracy, and reliability."¹³⁰⁰ Reportedly, Chinese sources also confirm the modernization program. At a July 2000 work conference of the Central Military Commission in Xishan, strategic nuclear force development for the period 2001-2009 was characterized as, "further replacement of the older generation of weapons, further upgrading, and further development."¹³⁰¹

There are two principal impetuses behind the modernization of the Chinese nuclear force structure. The first is the predictable process of replacing aging weapons systems with more modern counterparts. Most of China's operational missile forces, especially the CONUS-capable ICBMs, are 1950s-vintage liquid-fueled systems. As General Hughes has testified, "China's strategic nuclear force is small and dated, and because of this, Beijing's top military priority is to strengthen and modernize its strategic nuclear deterrent."¹³⁰² This effort has been assisted and accelerated in part by the ready access to technologies now available from Russia. The second driving factor behind Chinese modernization is a rising concern about the survivability of its nuclear deterrent, particularly given the prospect of the Strategic Defense Initiative in the 1980s and now the deployment of theater and national missiles defenses by the United States. Chinese perceptions about the survivability of its force were also undermined by DESERT STORM, which highlighted the ability of U.S. conventional forces to destroy fixed targets with precision-guided munitions and the concomitant inability of those same forces to destroy mobile targets. This realization no doubt reinforced the perceived desirability of modern, road-mobile nuclear forces.

The two principal programs in this modernization effort will be the DF-31 and the DF-31A.¹³⁰³ The mobile, solid-fuel DF-31 will have a range of 8,000 kilometers, and carry a payload of 700 kilograms. The origins of this missile are controversial. Lewis and Xue argue that the First Academy drew up plans beginning in 1974 to develop not only the JL-1 SLBM, but three other solid-propellant missiles as well over the subsequent decade, namely the DF-21, DF-21A, and the JL-2 SLBM.¹³⁰⁴ Another source claims that the DF-31 missile was an outgrowth of the DF-23 road-mobile, solid-fueled program,

¹²⁹⁹ *Cox Report*, pp. 185-86.

¹³⁰⁰ *Ibid.*

¹³⁰¹ See "Jiang Zemin Defines Position of China's Strategic Nuclear Weapons."

¹³⁰² General Patrick M. Hughes, Director of the Defense Intelligence Agency, Senate Armed Services Committee hearings on "Current and Projected National Security Threats," 2 February 1999.

¹³⁰³ Department of Defense, "Selected Military Capabilities of the People's Republic of China."

¹³⁰⁴ Lewis and Xue, *Strategic Seapower*, p. 181.

which began development in 1978 as a land-based missile, and was then modified to also serve as the basis for a submarine-launched SLBM, known as the JL-2. To confuse matters even further, a different Lewis article asserts that the R&D for the DF-23 began in August 1970, during "a particularly tense moment in Sino-Soviet confrontation."¹³⁰⁵ Regardless of its development path, the DF-23 was renamed the DF-31 in January 1985, although the designation JL-2 was not changed. In August 1999, China publicly declared the first full flight test of the DF-31.¹³⁰⁶ It is expected that the DF-31 will be deployed perhaps by the early 2000s.

The planned follow-on to the DF-31, the DF-31A, was officially initiated in July 1986.¹³⁰⁷ The three-stage, solid-propellant ICBM will have a range of 12,000 kilometers, thus making it capable of striking all targets in the CONUS. It is therefore the logical replacement to China's aging DF-5 force, which it will begin replacing around 2010. According to Lewis and Hua, the final basing mode for the DF-31A is still unclear, though it will be stored in caves and will likely be deployed on a road-mobile TEL.

Some reports indicate that China will launch a major effort to develop and construct a follow-on to the *Xia*-class nuclear ballistic missile submarines to be deployed after 2000. The next generation submarine, the 09-4, would probably deploy 16 of the new JL-2 SLBM, with a range of about 8000 kilometers.¹³⁰⁸ However, political and technological constraints may delay or even suspend the deployment of this boat.¹³⁰⁹

Implications. These future nuclear posture trends have significant implications for mobility, fuels, C4I accuracy, force size, warhead size, and the relative importance of conventional vs. nuclear missiles in the Chinese arsenal.

Mobility. Despite yeoman effort, the Chinese have largely failed to field a credible triad. Instead, the force remains highly unbalanced, with land-based missiles predominant over bombers and SLBMs, especially in the intercontinental category. As a result, Beijing has been forced to improve the survivability of its land-based missiles. Apart from the addition of solid fuels and improved C4I infrastructure, the Chinese began to move from silos and caves to a road-mobile force with missiles loaded on transporter-erector-launchers (TELs) as early as the 1970s.¹³¹⁰ With the planned deployments of the DF-31 and DF-31A ICBMs over the next ten to twenty years, the Chinese nuclear inventory will thus become increasingly mobile over time. This move will have the effect of enhancing the credibility of China's minimal deterrent posture, as long as such a large

¹³⁰⁵ Lewis and Hua, "China's Ballistic Missiles," p. 27.

¹³⁰⁶ National Intelligence Council, "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015," p. 11.

¹³⁰⁷ Lewis and Hua, "China's Ballistic Missile Programs," p. 29.

¹³⁰⁸ Office of Naval Intelligence, *Worldwide Submarine Challenges 1997* February 1997, p. 22.

¹³⁰⁹ Lewis and Xue, *China's Strategic Seapower*, pp. 236-37.

¹³¹⁰ Lewis and Hua, "China's Ballistic Missile Programs," p. 25.

force size asymmetry exists between China and the larger nuclear powers. Moreover, the deployment of the DF-31 and DF-31A theoretically increases deterrence stability with other nuclear powers by making China's force more survivable.

Solid Fuel. One impediment to greater flexibility and survivability in the Chinese force were the hazards associated with volatile liquid propellants.¹³¹¹ The move to solid fuel increases the credibility of the Chinese force by improving reaction times, thus raising its overall readiness level. As Godwin points out, however, solid fuels also "contain less thrust than liquid fuel, requiring China to develop smaller, lighter warheads with much better yield-to-weight ratios than its older weapons."¹³¹²

C4I Modernization. Speaking in 1999, the then-Director of the Defense Intelligence Agency General Patrick Hughes testified to Congress that China was actively engaged in "upgrade programs" for its nuclear C4I.¹³¹³ Overall, the modernization of Chinese nuclear C4I increases the credibility of the Chinese force by strengthening command and control. Specifically, it enhances the leadership's positive control over the force, increasing the probability that the NCA could survive an attack and respond. In the paradox of nuclear strategy, this development actually increases deterrence stability between China and other nuclear powers.

Accuracy. There is reason to believe that the Chinese Second Artillery is attempting to improve the accuracy of its strategic rocket forces. Pre-surveyed launch sites increase the potential accuracy of the new mobile systems. Chinese research institutes are reportedly attempting to increase precision by developing better gyros and inertial measurement units.¹³¹⁴ According to the Pentagon, China is using the Global Positioning System to make "significant improvements" in its missile capabilities. As an example, the DOD cites the use of GPS for midcourse guidance correction to improve missile accuracy, and also asserts that such satellite updates will "increase the operational flexibility of China's newer mobile missiles."¹³¹⁵ A RAND study on this subject concluded that GPS-aiding of ballistic missile guidance could improve accuracy by 20-25

¹³¹¹ The struggles over the transition from liquid to solid-fuel are well documented in *ibid.*

¹³¹² Godwin, "China's Nuclear Forces".

¹³¹³ General Patrick M. Hughes, Director of the Defense Intelligence Agency, Senate Armed Services Committee hearings on "Current and Projected National Security Threats," 2 February 1999.

¹³¹⁴ Stokes, *China's Strategic Modernization*, p. 91.

¹³¹⁵ U.S. Department of Defense, "Selected Military Capabilities of the People's Republic of China," report to Congress pursuant to Section 1305 of the FY97 National Defense Authorization Act, April 1997.

percent.¹³¹⁶ Greater accuracy might signal a desire for eventual counterforce capabilities, though force size will be an important constraint on successful transition to a more offensive posture.

Greater Numbers. The Cox Report and other analyses predict that the Chinese nuclear force structure will likely increase in size, and therefore pose a greater threat to the United States.¹³¹⁷ Why would the Chinese force increase in size? An increase in missiles would make it more difficult for an opposing force to “decapitate” the Chinese force, which has been a prevailing fear since the beginnings of the program and has only become more frantic in an age of growing American predominance in space-based reconnaissance. More Chinese missiles might signal a possible shift from a retaliatory countervalue posture to an offensive counterforce posture, particularly if accompanied by necessary improvements in accuracy. According to Godwin, a sufficient number of weapons could permit China for the first time to attempt intrawar escalation control, since Beijing would retain enough forces to respond at a higher level if the aggressor chooses to escalate a nuclear exchange.¹³¹⁸

An increase in missiles is also the logical response to the deployment of theater and national missile defenses among the United States and its allies, which the Chinese view as an organic whole rather than separate programs (as one Chinese arms controller put it, “two sides of the same coin”). Proponents of TMD/NMD point out that the Chinese are already modernizing their missile forces, so defenses are not to blame for increases in the quality and quantity of the Chinese force. This is probably true, but must also be accompanied by an honest recognition that TMD/NMD deployment will likely accelerate this effort and push the Chinese to spend more money on relatively cheap anti-missile defense accessories, such as countermeasures and decoys. Perhaps the only good news is that limited increases in Chinese missiles would paradoxically increase deterrence stability between China and other nuclear powers and allow China to maintain a no-first-use principle by reducing the likelihood that the PRC’s force could be destroyed in an all-out pre-emptive attack.

At the same time, we must also entertain the definite possibility that the new generation of missiles are meant only to replace the aging veterans of the fleet, particularly the DF-4 and DF-5. If the Chinese eventually exchange the road-mobile, solid-fueled DF-31s and DF-31As for these liquid-fueled, silo- and cave-based missiles on a one-to-one basis, or even two-to-one basis, then the net result is *ceteris paribus* an increase in the credibility of China’s previously suspect minimal deterrent, not necessarily a fundamental shift to an offensive posture. Moreover, as the significant delays in the IOCs of past systems and the inaccurate estimates of DF-31/DF-31A/DF-25 deployments in Lewis and Hua’s 1992 article attest, we should not be overly optimistic about the

¹³¹⁶ Scott Pace, et al., *The Global Positioning System: Assessing National Policies*, Santa Monica, Calif.: RAND, Critical Technologies Institute, MR-614-OSTP, 1995, p. 68.

¹³¹⁷ *Cox Report*, pp. 185-86.

¹³¹⁸ Godwin, “China’s Nuclear Forces”.

production timelines or output estimates offered by the Chinese for the rollout of the next generation of missiles, but should instead maintain a sober view of the impressive but sometimes erratic production cycles in the Chinese missile system.

MIRVing? Since the late 1980s, China has conducted a series of smaller-yield tests, apparently intended to develop smaller, lighter warheads with an improved yield-to-weight ratio,¹³¹⁹ though this trend could be traced as far back as 1970.¹³²⁰ Most analysts agree that the likely purposes was to develop new warheads for single placement on China's next generation solid-fuel ICBMs (DF-31 and DF-31A), as well as ensure the safety and reliability of new warhead designs.¹³²¹ The antecedents of the DF-31 and DF-31A programs, which were initiated in the early 1970s, were move to mobile forces required the development of smaller missiles, which in turn required smaller warheads.

Others have added an additional, controversial motivation for the testing of smaller warheads – the development of a multiple warhead capability, possibly MRV or even MIRV.¹³²² The Cox Committee, for example, concluded that “the PRC has demonstrated all of the techniques that are required for developing a MIRV bus, and that the PRC could develop a MIRV-dispensing platform within a short period of time after making a decision to proceed.”¹³²³ Often, this desire is linked to a perceived future Chinese intent to develop flexible response, counterforce-oriented nuclear forces, though the smaller warheads could also be used as MIRVs on the existing DF-4s and DF-5As. There is significant evidence to suggest that the Chinese have been actively interested in developing multiple warhead technology for more than 20 years.¹³²⁴ However, the current small size of the Chinese force and the mainstream projections of the size of the

¹³¹⁹ Banning N. Garrett and Bonnie S. Glaser, “Chinese Perspectives on Nuclear Arms Control,” *International Security*, vol. 20, no. 3, Winter 1995/96, pp. 55-56; Godwin and Schulz, “China and Arms Control,” p. 9; Robert S. Norris, “Nuclear Arsenals of the United States, Russia, Great Britain, France and China: A Status Report,” presented at the 5th ISODARCO Beijing Seminar on Arms Control, Chengdu, China, 12-15 November 1996, p. 5; and Norris and Arkin, “British, French, and Chinese Nuclear Forces,” pp. 66-67.

¹³²⁰ Lewis and Hua, “China's Ballistic Missiles,” p. 21.

¹³²¹ Dingli Shen, “The Prospects For A Comprehensive Test Ban Treaty: Implications Of Chinese Nuclear Testing,” in W. Thomas Wander, Eric Arnett, and Paul Bracken, eds., *The Diffusion of Advanced Weaponry: Technologies, Regional Implications, and Responses*, Washington, D.C.: American Association for the Advancement of Science, 1994, pp. 272-273.

¹³²² Cox Report.

¹³²³ Ibid.

¹³²⁴ The Intelligence Community Damage Assessment on the Implications of China's Acquisition of U.S. Nuclear Weapons Information on the Development of Future Chinese Weapons, 21 April 1999 (hereafter The Intelligence Community Damage Assessment).

future force make it unlikely that China seeks multiple warheads for counterforce purposes. Instead, an examination of the timelines for MIRV research in China suggest that the focus of the multiple warhead effort is anti-BMD. Lewis and Hua assert that the Chinese began to study MRVs and MIRVs in 1970 as a response to U.S. deployment of multiple warhead systems, but lowered the priority of the effort in March 1980 after more than a decade of problems.¹³²⁵ Work on multiple warheads was resumed on 10 November 1983, however, when the First Academy included them in the DF-5A modification program.¹³²⁶ Some reports suggest that missile tests undertaken between fall 1986 and late 1987 were for the development of multiple-warhead missiles, including at least one such test for the DF-5A ICBM.¹³²⁷

Why the renewed interest after years of difficulty? Lewis and Hua give us no clues, but the U.S. announcement of the Strategic Defense Initiative in March 1983 seems too great a coincidence to ignore. If we assume that U.S. SDI and now NMD research is driving the current round of Chinese efforts to develop multiple warheads, then a number of potential implications can be offered. The first critical variable is the status of Chinese nuclear testing. Despite allegations of nuclear espionage, Chinese accession to the CTBT would significantly impair China's ability to make progress in this area, particularly given the conclusion of the Jeremiah Commission that China has not deployed a MIRV on its ICBMs.¹³²⁸ Even if we assume that the Chinese have already achieved a level of miniaturization necessary for MIRVing or will do so in the near future, a second critical variable will be the size of the future Chinese nuclear force posture, particularly the CONUS-capable forces. If China maintains a relatively small ICBM force, eventually replacing its several dozen DF-4s and DF-5As with a comparable number of DF-31s and DF-31As, respectively, then Chinese MIRVing along with robust decoys and countermeasures is likely meant to try and overwhelm the proposed 100- or 200-interceptor NMD system, not necessarily perform offensive counterforce attacks. A larger force of ICBMs makes this distinction murkier, but the overwhelming, triadic force asymmetry of the United States vis-a-vis China for the foreseeable future severely reduces the possibility that China could hope to achieve its goals with a preemptive strike.

Increased reliance on conventional missiles. Given China's immediate security contingencies vis-à-vis Taiwan, the Second Artillery over the past 10 years has dramatically restructured its force to give conventional missiles – such as the DF-11 and DF-15 – far more weight in its overall posture. Looking ahead, it is likely that more effective, conventionally-armed land-attack cruise missiles (LACMs) will also be integrated into the Second Artillery force structure, doctrine, and operational

¹³²⁵ Lewis and Hua, "China's Ballistic Missiles", p. 21.

¹³²⁶ Ibid., pp. 21-22.

¹³²⁷ Lin, *China's Nuclear Weapons Strategy*, p. 51; Stockholm International Peace Research Institute, *SIPRI Yearbook 1987: World Armaments and Disarmament*, Oxford: Oxford University Press, 1987, p. 34.

¹³²⁸ *The Intelligence Community Damage Assessment*, 21 April 1999.

planning.¹³²⁹ As one researcher at China's National Defense University has written, "nuclear retaliation remains the solid foundation of the Strategic Rocket Forces ..." But given events such as the Desert Storm and the U.S.-led NATO effort against Yugoslavia, "the particular features of world military combat and China's peripheral situation demands that the Second Artillery develop its conventional ballistic missile capability." The author argues the Second Artillery shift conceptually from "nuclear retaliation" (*he baofu*) to "nuclear /conventional, two roles" (*he chang liang yong*).¹³³⁰ The discussion above on China's build-up of conventional missiles provides ample physical evidence of this shift in how the Second Artillery will approach its mission in the future.

CONCLUSIONS

Based on a review of Chinese nuclear principles, and an empirical study of the history, organization and force structure of the Second Artillery, we reach a number of important findings. We conclude that the operational survivability of China's nuclear retaliatory capability vis-à-vis major nuclear powers was and probably still is open to question, particularly in the context of an all-out preemptive strike. At best, then, China's minimal deterrent was primarily psychological, though the potency of this aspect of the deterrent should not be underestimated. The PRC's missile modernization program, therefore, has been a quest to increase the credibility of this deterrence posture by improving the readiness and survivability of the force. Measures being implemented are a transition from volatile liquid fuels to more stable solid fuels, a transition from fixed basing to mobile basing, and the construction of a robust C4I infrastructure. As of yet, the Chinese have not operationally deployed any of either of their planned solid-fueled, road-mobile ICBMs, though the shorter range DF-31 seems to be nearing IOC after more than 30 years of work. When these systems come online, the Chinese will have finally succeeded in fielding a much more credible minimal deterrent force, whose mobility and readiness theoretically increase the chances that some percentage of the force could survive a first strike and thus effectively deter potential attackers.

At the same time, however, the Chinese force has grown to encompass more than simply minimal deterrent forces, including theater and tactical systems. Viewed in its totality, the Chinese nuclear force structure seems to defy simple categorization as either minimal or "limited" deterrence. The multi-faceted force is made up of strategic, theater, and tactical systems of varying range, accuracy, and yield, reflecting the very different

¹³²⁹ Mark Stokes, "China's Military Space and Conventional Theater Missile Development: Implications For Security In The Taiwan Strait," in Robert Sutter, ed., and Bates Gill, "China's Second Artillery: Transition to Credible Deterrence," in *China and Weapons of Mass Destruction: Implications for the United States*, Washington, DC: Government Printing Office, 5 November 1999.

¹³³⁰ Sun Kuaiji, "Cong 'he bao fu' dao 'he chang liang yong' [From 'Nuclear Retaliation' to 'Nuclear/Conventional Two Roles']," *Ban Yue Tan* [China Comment], no. 1, 2000.

missions it is required to perform. The small ICBM force, anchored by the DF-5 family of missiles, appear to be second-strike minimal deterrence forces. The theater systems, by contrast, are unlikely to be used in a second-strike, minimal deterrent role following a preemptive strike. Instead, theater systems look like offensive systems meant to strike U.S. forces and bases in Asia to degrade conventional capability. The short-range, ballistic missile forces, which are also nuclear capable, further confuse the situation by serving a variety of conventional warfighting and nuclear warfighting roles. For the future, the doctrine and force structure of China's Second Artillery must be analyzed at three distinct levels: a posture of *credible minimal deterrence* with regard to the continental United States and Russia; a more offensive-oriented posture of "*limited deterrence*" with regard to China's theater nuclear forces; and an *offensively-configured, preemptive, counterforce warfighting posture* of "active defense" or "offensive defense" for the Second Artillery's conventional missile forces.

How did the Chinese force evolve into this arrangement? First, our analysis tends to confirm the arguments of Lewis, *et al.* of the *importance of technology as a determinant of Chinese doctrine*. The progression of missile systems, with their gradually expanding ranges and capabilities, defined the limits of the possible for the Chinese leadership. However, we disagree that technology alone determined the nature of the Chinese nuclear force posture. Central guidance on ranges and payloads, while admittedly vague, appears to conform with strategic-level perceptions of threats and goals in the external security environment, especially when matched with the corresponding logical deployment pattern outlined in section three. Perhaps it could be said that the Chinese made a *virtue out of necessity* in the construction of their nuclear deterrent, accepting the technological constraints of the system and making rational choices under those constraints.

In the end, however, we question whether China ever actually achieved a fully credible minimal deterrent. Thus, our attention has focused on the discontinuity between reality and aspiration, which is oftentimes referred to as the "capabilities-doctrine gap." At the present stage in the Second Artillery's modernization, China is nearing an historic convergence between doctrine and capability, allowing it to increasingly achieve a degree of *credible minimal deterrence* vis-à-vis the continental United States – a convergence of its doctrine and capability it has not confidently possessed since the weaponization of China's nuclear program in the mid-1960s.

But what about "limited deterrence"? Recent studies find that since at least the late-1980s, Chinese military writings have promoted the need for China to develop a "limited deterrence" – as opposed to a "minimal deterrence" – doctrine. While these writings are not considered official declarations of doctrine, the fact that they are written by military analysts and appear in officially-sanctioned military publications gives them a special salience which deserves further scrutiny. In analyzing these writings, Johnston observes the emergence of "more comprehensive and consistent doctrinal arguments in favor of developing a limited flexible response capability" and that "Chinese strategists

have developed a concept of limited deterrence ... to describe the kind of deterrent China ought to have."¹³³¹

In general and specific terms, these Chinese writings call for limited, counterforce, war-fighting capabilities "to deter conventional, theater, and strategic nuclear war, and to control and suppress escalation during a nuclear war."¹³³² According the Chinese analysts, such a posture requires:

a greater number of smaller, more accurate, survivable, and penetrable ICBMs; SLBMs as countervalue retaliatory forces; tactical and theater nuclear weapons to hit battlefield and theater military targets and to suppress escalation; ballistic missile defense to improve the survivability of the limited deterrent; space-based early warning and command and control systems; and anti-satellite weapons (ASATs) to hit enemy military satellites.¹³³³

Because such a posture would require a significant increase in Chinese capabilities, Johnston correctly highlights the gap between this proposed doctrine on the one hand, and actual capabilities on the other. As Godwin points out, the lack of any space-based reconnaissance or early warning systems means that Beijing's command and control system does not have the ability in real time to determine the size and origin of the attack, making it difficult to determine what kind of response is required - an essential component of the more sophisticated versions of limited deterrence found in Chinese military journals.¹³³⁴ Johnston also notes that actually achieving such a deterrent posture is not an inevitable outcome, owing to a number of possible constraints.

We have little basis for questioning the findings of Johnston about internal military writings on nuclear deterrence, especially the striking lack of discussion of the term "minimal deterrence." There are a number of possible explanations. Paul Godwin suggests that Mao Zedong's death in 1976 and the implementation of Deng Xiaoping's military reforms in the late 1970s permitted China's military analysts to explore issues of doctrine and strategy "free from the stultifying requirement to verify everything they wrote with a literal interpretation of Mao's writings and statements."¹³³⁵ Second, Godwin points to the increased battlefield nuclear weapons threat on the Sino-Soviet border, which "raised the salience of strategic deterrence and nuclear warfighting to a level it had never before achieved," encouraging Chinese military analysts to read

¹³³¹ Johnston, "China's New 'Old Thinking'," p. 5.

¹³³² Ibid., p. 19.

¹³³³ Ibid., p. 20.

¹³³⁴ Godwin, "China's Nuclear Forces".

¹³³⁵ Ibid.

extensively in Western theories and journals.¹³³⁶ Johnston himself offers some additional explanations in the last few pages of his *International Security* article.¹³³⁷ Many of the PLA authors explicitly contrast limited and minimal deterrence, obviating the possibility that they have simply renamed the previous doctrine for bureaucratic purposes. The authors appear to be well-placed to affect the operational doctrine of the Second Artillery, removing the possibility of a disjuncture between academic and military writings, as occurred between the writings of RAND strategists and the war-winning strategy of General LeMay at Strategic Air Command. If limited deterrence is defined as flexible response, counterforce warfighting, then perhaps limited deterrence is the *aspirational* doctrine for a future Second Artillery, though the past production timelines of the missile industry should sober our expectations of its appearance anytime soon.

We would add three more caveats to interpret the emergence and meaning of an ostensible limited deterrence posture in China. First, assuming a continued adherence by China to its testing moratorium, and the possibility that it will ratify the CTBT in the future, we question the ability of China to confidently develop smaller, lighter, and more accurate nuclear warheads (including potential MRV and MIRV capability) consistent with the limited deterrent aspirations described by Chinese analysts in the late-1980s and early 1990s.

Second, it is possible that the tripartite system we describe is a confirmation of Johnston's conclusions about limited deterrence, and we have simply come to the same place from a different direction. Perhaps the Chinese, when they looked at the multifunctional force structure they created, felt that minimal deterrence no longer could encompass all of the various defensive and offensive, long-range and short-range systems in their arsenal. Borrowing from Confucius, they may have concluded that harmony could only be restored when the name of the thing matched the nature of thing, and the product of this *zhengming* was "limited deterrence."

Third, however, even if we accept limited deterrence as an overarching *aspirational* goal of this multi-faceted system, we still reject the misinterpretation of Johnston's writings by some, such as the Cox Committee and others, to mean that the Chinese are unquestionably engaged in an aggressive modernization of their missile forces meant to enable counterforce warfighting. Indeed, as we have outlined in this paper, there are legitimate, alternative explanations for many of the hardware trends in China. Reforms in mobility, readiness, and C4I infrastructure are readily and more comprehensively explained as an attempt to increase survivability from foreign attack – simply the long-sought confidence of a credible deterrent, notwithstanding Chinese analytical differentiation between "limited" and "minimal" deterrence -- and not necessarily to achieve a warfighting, war-winning strategy. Moreover, as long as the numbers of the force stay beneath a certain level, increases in accuracy and multiple warheads do not pose a threat to American and Russian overwhelming nuclear superiority. American strategic nuclear forces, we must remember, still number around

¹³³⁶ Ibid.

¹³³⁷ Johnston, "China's New 'Old Thinking'," pp. 35-36.

8,000 deployed on 575 ICBMs, 102 strategic bombers, and 17 SSBNs. Indeed, a single *Trident* SSBN, carries more missiles (24) than the entire Chinese ICBM inventory.

The troubling countertrend involves the introduction of theater and national missile defenses into the equation, dramatically complicating China's strategic environment. Whereas China previously faced a world marked by the threat of offense racing, the post-BMD world will be marked by the unpredictable interactions of offense racing, defense racing and countermeasure/decoy racing. In this environment, China would be acting rationally if it accelerated the desultory pace of its missile modernization, spending more money on relatively cheap countermeasures and decoys. In order to develop smaller warheads for penetrating missile defenses, it would be acting in its self-interest by opting out of CTBT and resuming testing. Finally, China might even seek to foil missile defenses by proliferating its countermeasures technology to other emerging nuclear states. All of these trends would reduce the security of the United States. It is our hope that a sober understanding of the nature and purpose of Chinese nuclear force modernization and doctrinal evolution could forestall such an outcome.

**Figure 11.1 National Wartime Second Artillery Command Structure
(Conventional Weapons)**

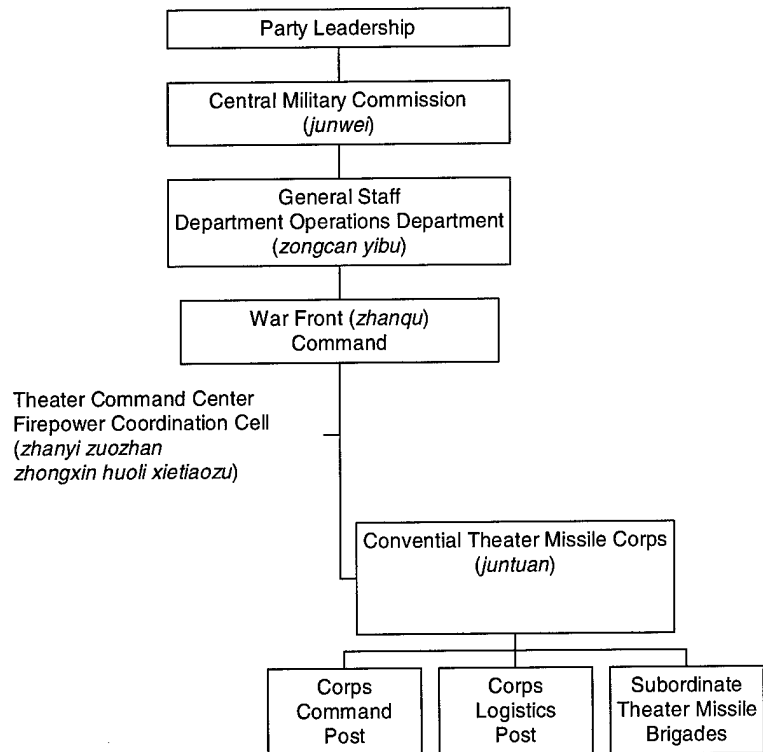


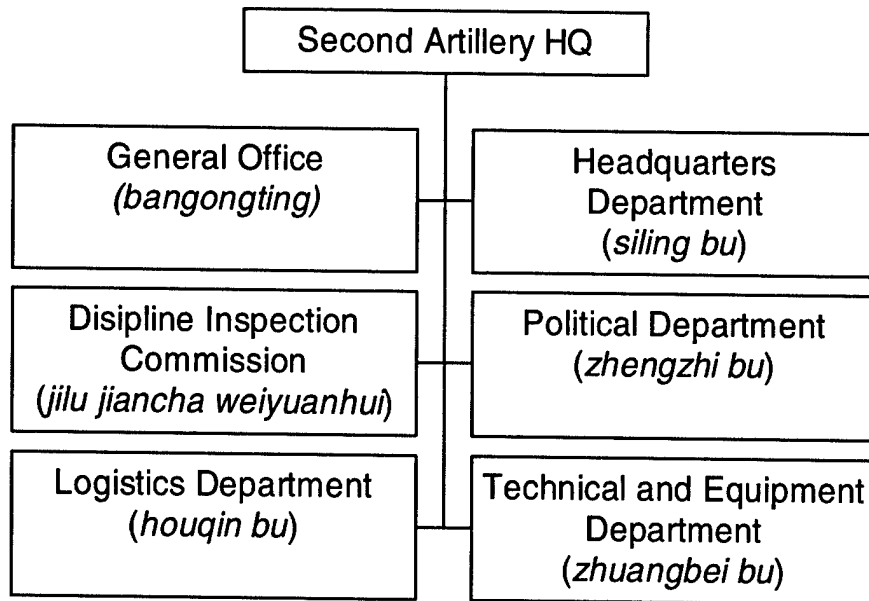
Figure 11.2 Known Second Artillery Headquarters Units

Figure 11.3 Known Second Artillery Headquarters Department Units

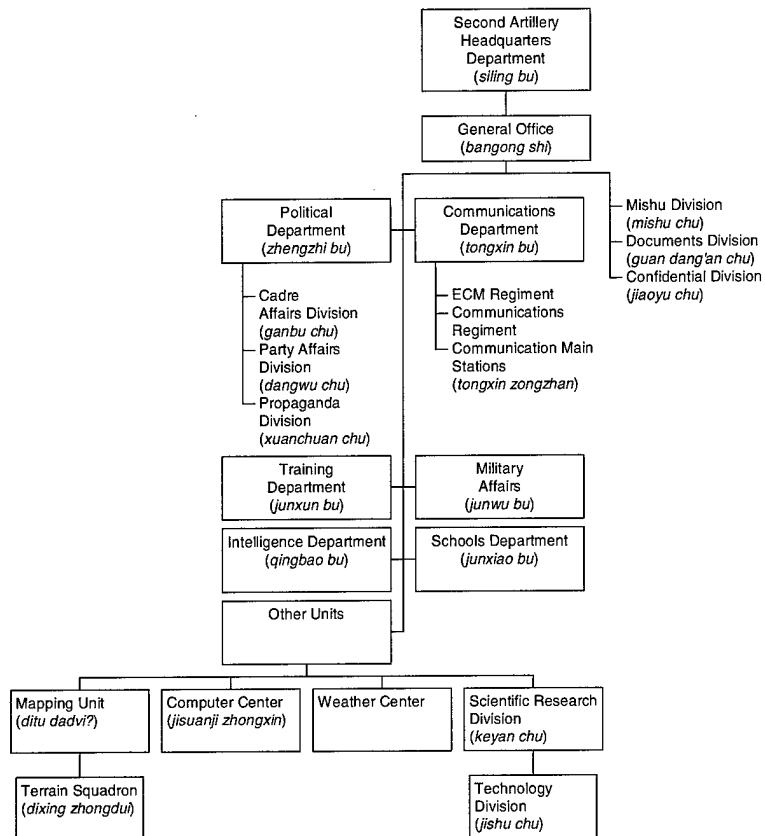


Figure 11.4 Known Second Artillery Political Department Units

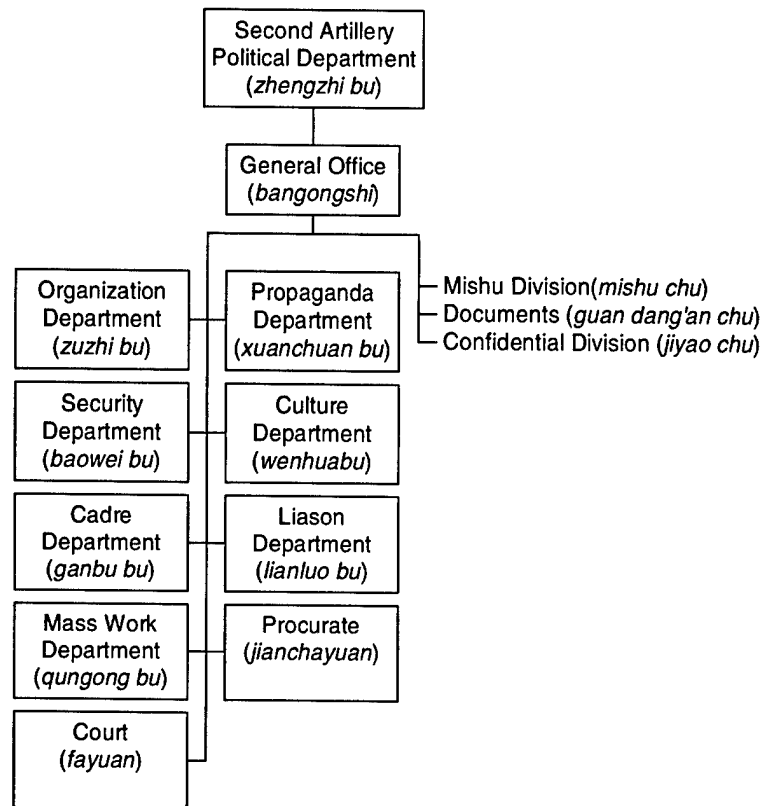


Figure 11.5 Known Second Artillery Logistics Department Units

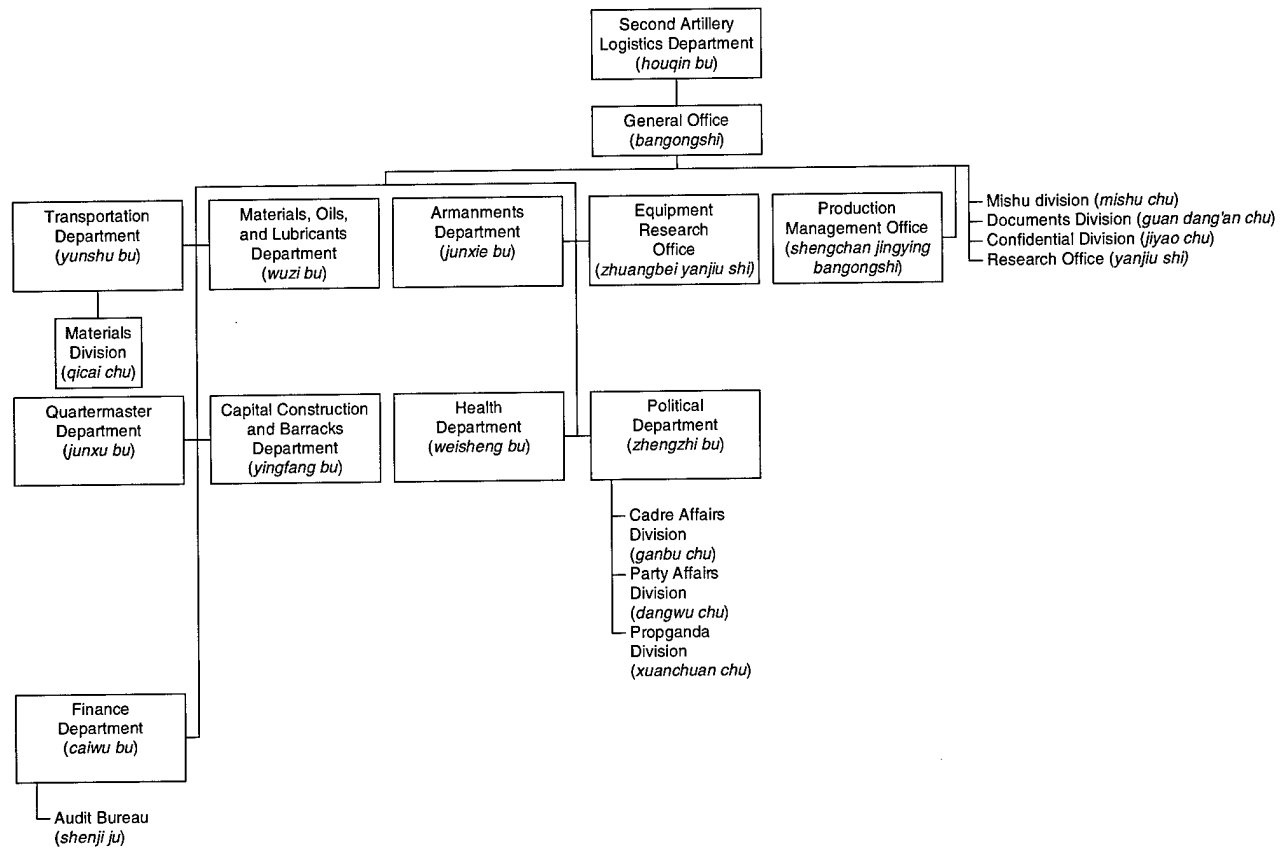


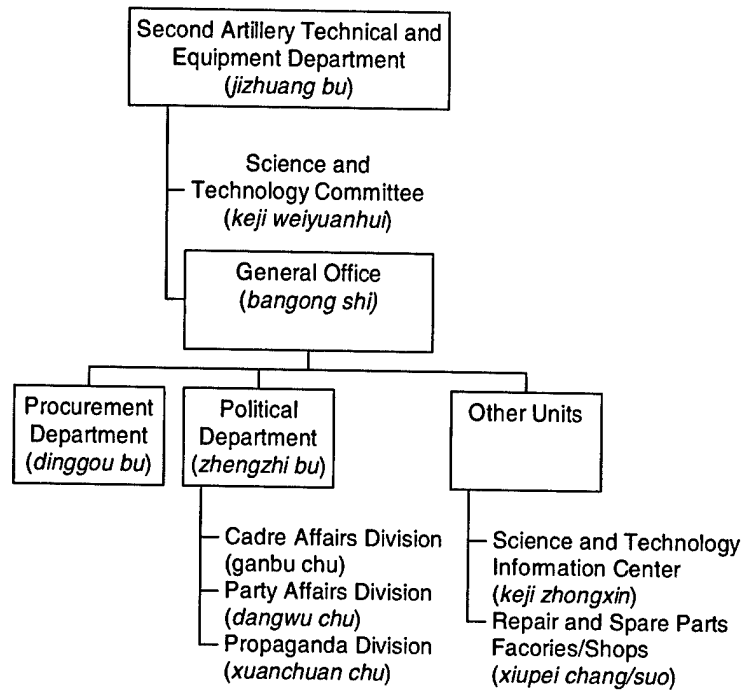
Figure 11.6 Known Second Artillery Technical and Equipment Department Units

Figure 11.7 Known Base Unit Headquarters Units Second Artillery

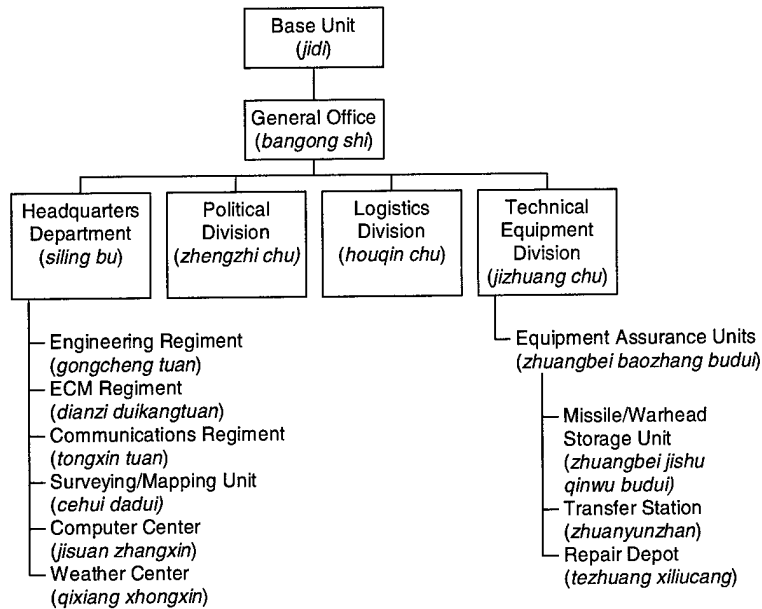


Figure 11.8 Base Headquarters Department (silingbu) Second Artillery

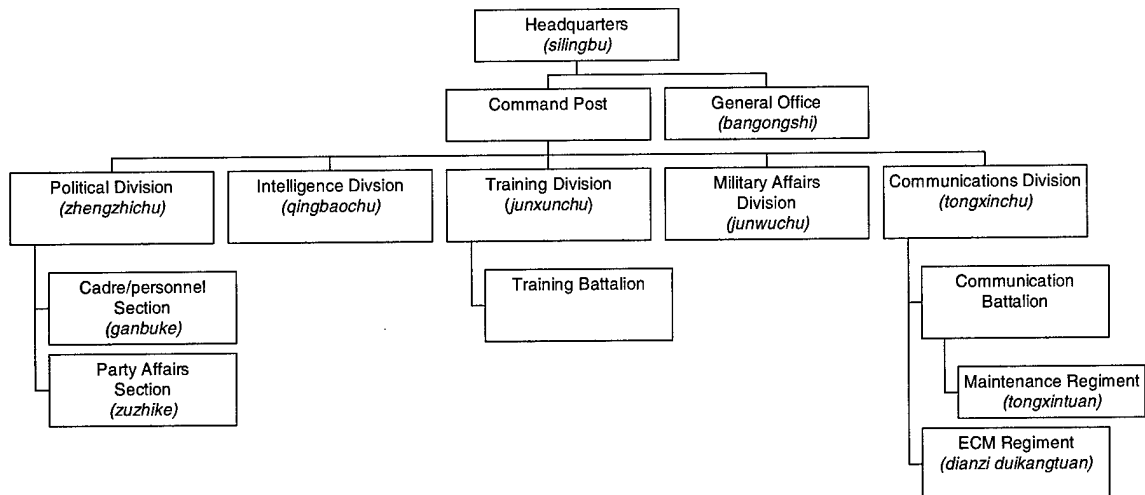


Figure 11.9 Known Base Political Division Units (*zhengzhi chu*) Second Artillery

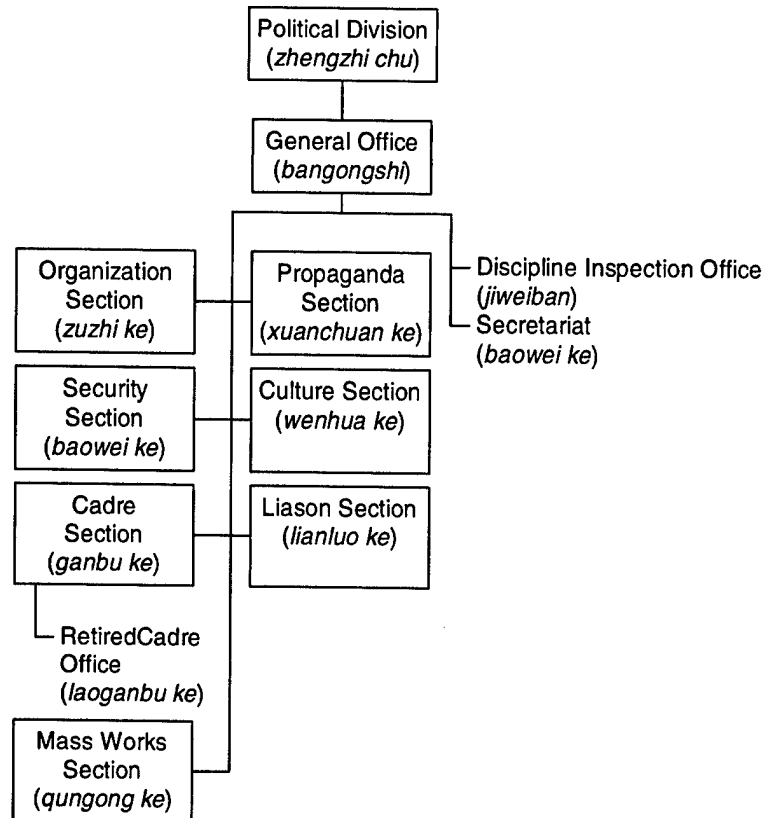
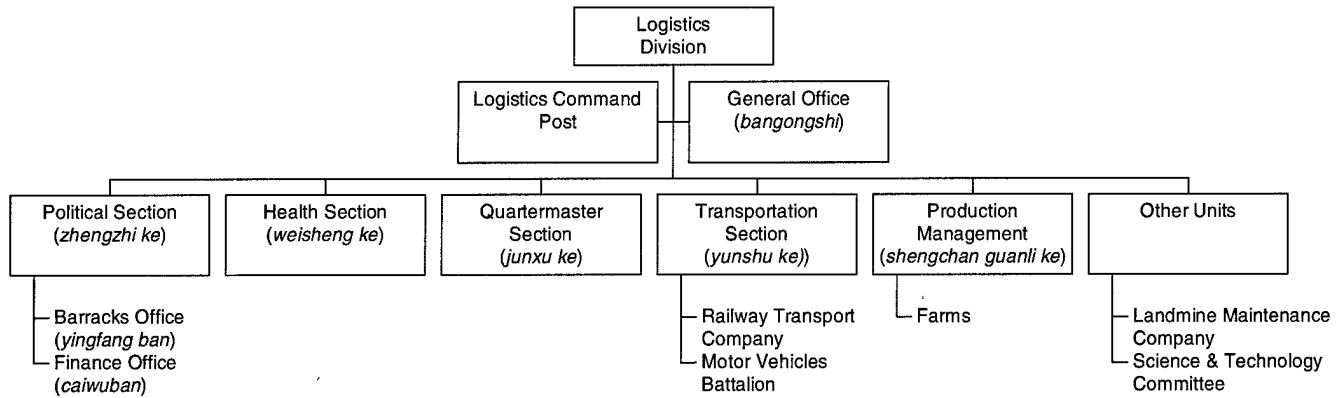


Figure 11.10 Known Base Logistics Department Units (*houqin chu*) Second Artillery



**Figure 11.11 Known Base Technical & Equipment Division Units (*jizhuang chu*)
Second Artillery**

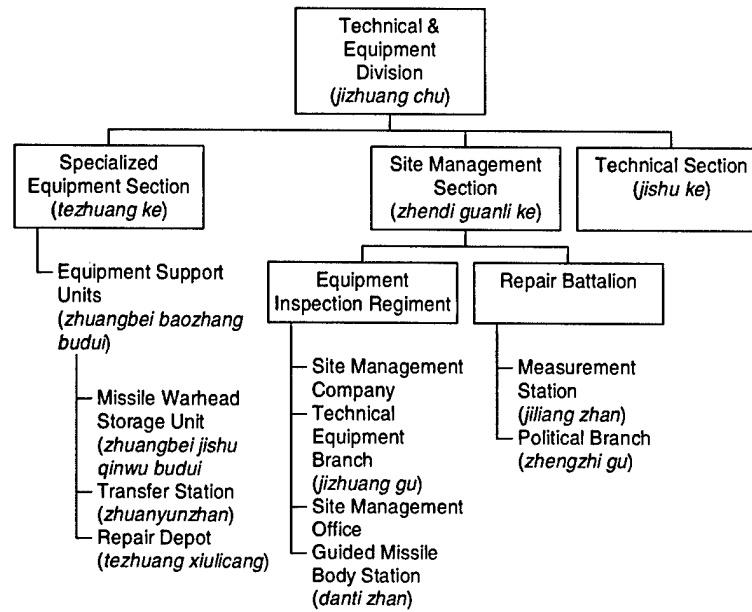


Figure 11.12 Known Nuclear Missile Brigade Units

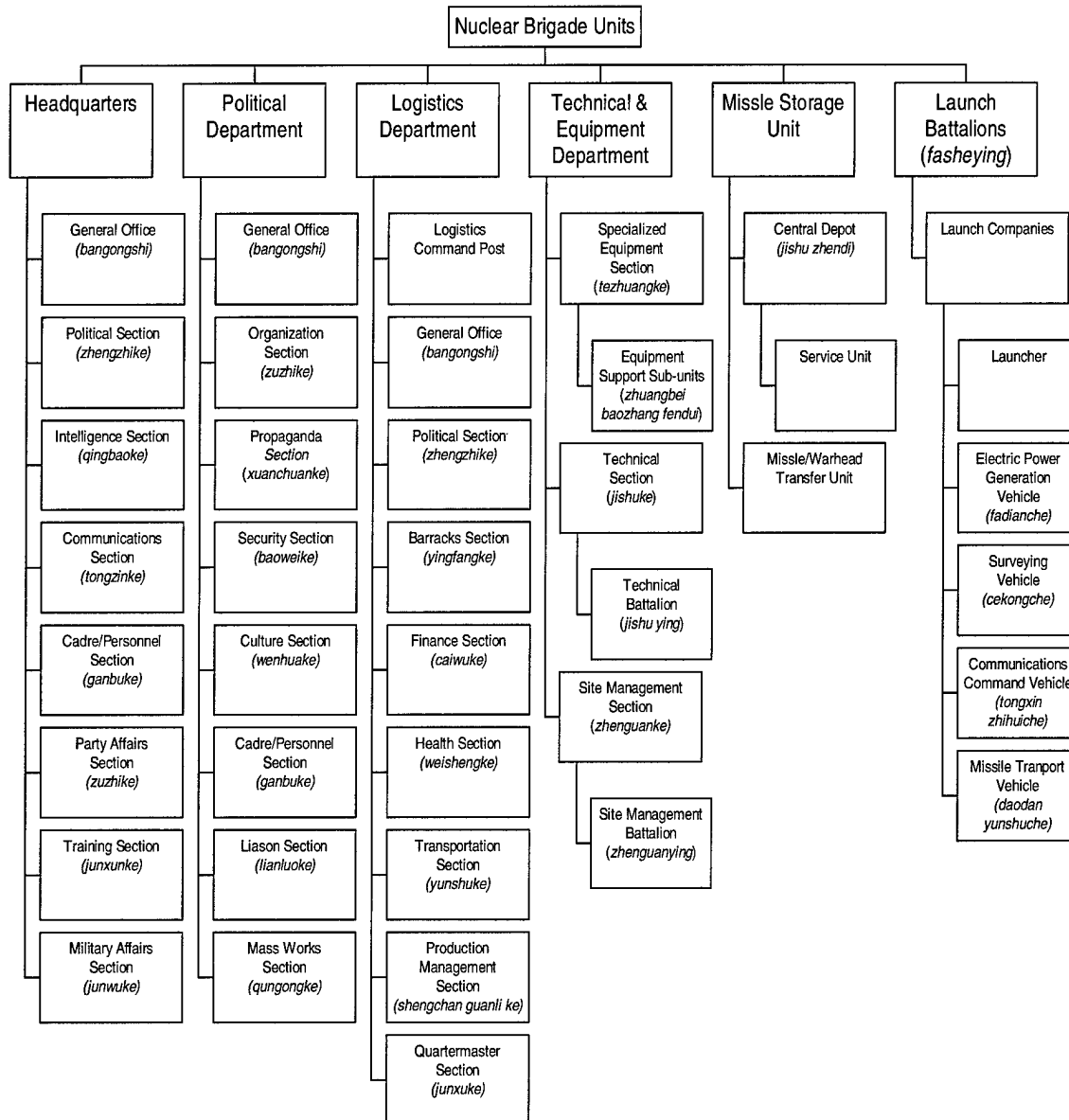
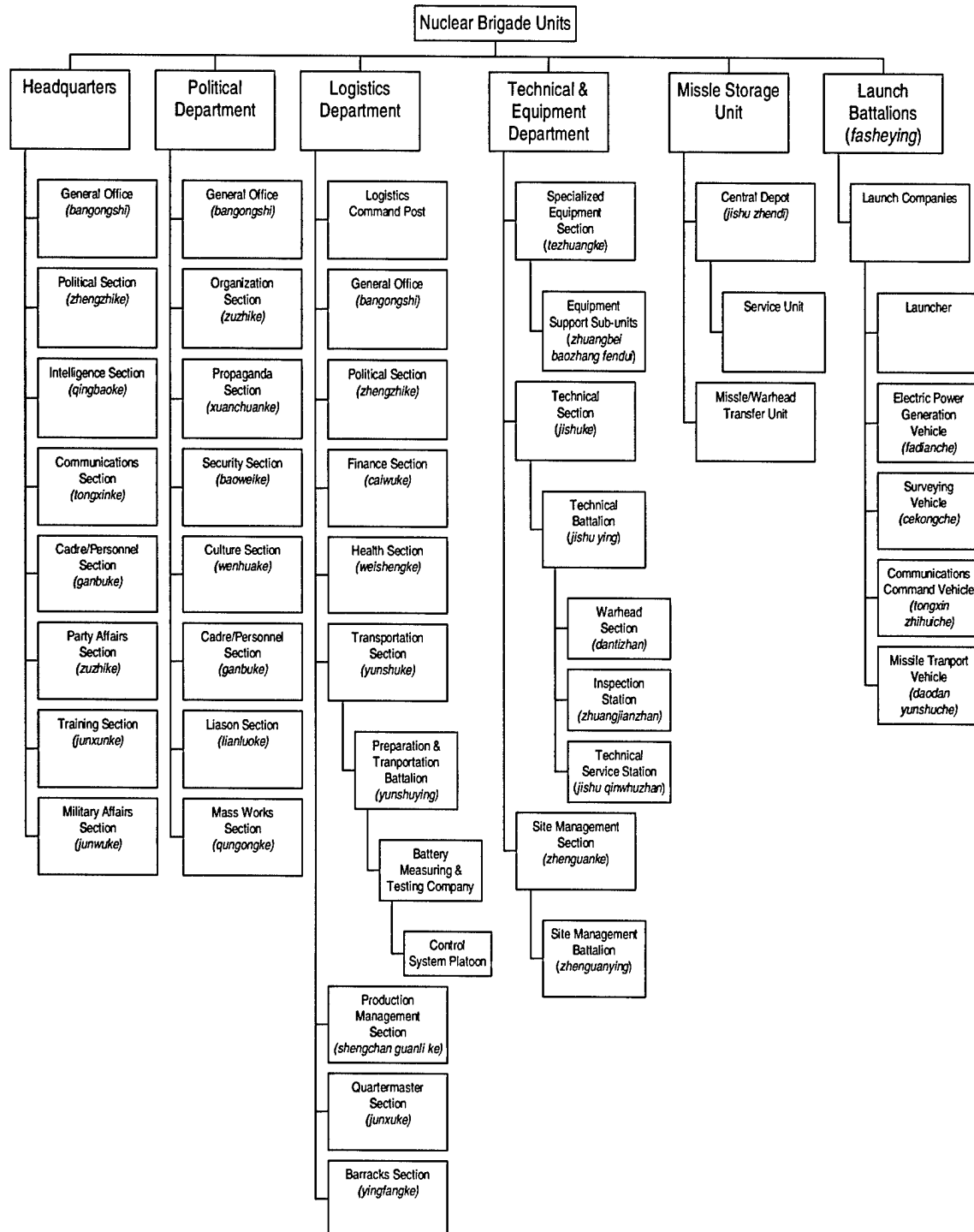


Figure 11.13 Known Conventional Missile Brigade Units



APPENDIX: Known Second Artillery Military Unit Cover Designators (MUCDs)

Number Translations:

80XXX is also known as an MUCD (E) designator, with each number matched to a corresponding letter, 8 equals M and so on.

803XX series are base-level units. The last number corresponds to the base designation, ie. 80301 is also known as the 51 Base, and 80302 is also known as the 52 Base.

80401-80416 Series are the basic launch units (launch brigades)—this number will increase as the 2nd Artillery expands its conventional force. The last two digits (D and E) denote the brigade designation. For example, 80401 denotes the 801st Missile Brigade.

8043X- 8045X series are probably more specialized units at the regiment level. They may be used for testing or experimental purposes. Two of the units in this series end in 1, (80431, 80451) and the other three are all located in the 80310 Base.

805XX series are engineering or construction units of regimental size. At 80590 level and beyond, the units appear to be special engineering units. It may be that these units are formed only for a special project and are officially disbanded when the project is over, with some of the officers remaining behind with the newly-established missile site units. For example, see the Sub-unit 13, described in Base 54, as 80591.

807XX Series are regiments or battalions that support the various bases. The third or “C” digit (7) indicates that the unit is a missile support unit. The fourth digit in the 807XX series corresponds to the base. For example, the 80713 unit is subordinate to the 80301 Unit (51 Base) in Shenyang. The last digit denotes the type of unit. For example, the 807X1 units have been identified as training battalions, the 807X3 units are warhead battalions, and the 807X4 are repair battalions. The 807X3 warhead battalions may be called “technical units” (*jishu ying*). This is apparently different from the *jishu ying* at sub-battalion level, such as in 80408 in Base 53.

808XX series may be training or transport units directly under the 2nd Artillery headquarters to deal with some special warhead and missile storage facilities, maintenance units, and special warhead/missile transportation services. It may include a communications engineering regiment, surveying/mapping “group” (*da dui*), which has a subordinate 2nd company and satellite battalion.

Base 51: 80310 (Shenyang, Liaoning Province)

Launch complexes at Tonghua and Deshenghua.

-Three launch brigades and three support units identified, as well as the following:

- (1) Political Department
 - Discipline Inspection Office
- (2) Logistics Department
 - Barracks Office
 - Motor Vehicle Battalion
 - Radio Station
- (3) 101 Sub-Unit
- (4) Bei'an Farm in Helongjiang

80406: 806 Missile Brigade (Hancheng City, Shaanxi)

- (1) Technical and Equipment Dept., Specialized Equipment Office (*tezhuang chu*)
- (2) First Launch Battalion
- (3) Logistics Department
 - Finance Section

80410: 810 Missile Brigade (Dalian, Liaoning)

- (1) Technical and Equipment Dept.
- (2) 3rd Launch Battalion
- (3) 2nd Battalion, includes Sub-Units: 213, 253, 242, 250

80451: (as of 1995 the 80451 unit was an experimental unit for the introduction of the DF-21 in the Tonghua area)

- (1) Technical and Equipment Office
- (2) Specialized Equipment Section (*gu*)
- (3) 1st Launch Battalion (EM says 1 Launch Battery at Company level)

80714: Repair battalion

- (1) Measurement Station (*jiliang zhan*)

80711: Training battalion

80713: Equipment Inspection Regiment (possibly specializing in warhead inspection, also possibly known as "warhead battalion" or "technical unit")

- (1) Technical and Equipment Office, Site Management Section (*gu*) according to MS,
- (2) Guided missile body-station (*Danti zhan*)

Base 52: 80302, Huangshan, Anhui (not Jiangxi, as MS claims, right?) Province
One launch complex near Lianxiwang , with both nuclear and conventionally-armed missiles

- (1) Unit has total of three launch units and 4 support units, as well as the following:

Logistics Department

- Barracks Office
- Sanlong Tree Farm

- (2) Science and Technology Committee

Engineering Battalion

Landmine Maintenance Company

128 Sub-Unit

133 Sub-Unit

80302:

- (1) Technical and Equipment Dept.
- (2) Site Mgmt. Office

80407: 807th Missile Brigade

- (1) Technical and Equipment Dept.
- (2) Specialized Equipment Section
- (3) Site Location Brigade

80411: 811 Missile Brigade (Shitai, Anhui Province)

- (1) Technical and Equipment Dept.,
- (2) 2 Launch Battalions
- (3) 3rd and 4th Battery
- (4) 4th Battalion includes Sub-Units: 190, 233, 242, 252, 272,

80415: DF-15 Brigade (Leping, Jiangxi Province)

80724: Support Unit for Base 52, (Xiuning, Anhui), Repair battalion

- (1) Political Office (at regiment level)
- (2) 2nd Car rooms (*Er che jian*)

80723: Support Unit for Base 52 (warhead battalion)

- (1) Sub-unit 410 (Jingdezhen, Jiangxi Province)
- (2) Sub-unit 420

80721: Support Unit (training battalion)

- (1) Political Office (at regiment level)
- (2) Logistics Office (at regiment level)

80722: Support Unit

Base 53: 80303 (Kunming, Yunan Province)

-Two launch units and two support units identified to date

- (1) Political Department
 - Secretariat
- (2) Logistics Department
 - Finance Office
 - Railway Transportation Company
- (3) Motor Vehicles Battalion
- (4) Number 70
- (5) Sub-Unit 112
- (6) Telephone Operators Platoon

80303:

- (1) Technical and Equipment Dept., Site Management Office

80402: 802 Missile Brigade, (Jianshui, Yunan Province)

- (1) Technical and Equipment Dept.
- (2) Specialized Equipment Section
- (3) First Launch Battalion
- (4) Political Dept., Propaganda Section
- (5) Armaments Dept.

80408: 808 Missile Brigade

- (1) Technical and Equipment Department
- (2) Technical Battalion (*Jishu ying*)

80733 Warhead battalion

- (1) Technical Service Station

80734 Measurement Station (*Jiliang zhan*), repair battalion**Base 54: 80304 (Luoyang, Henan Province)**

-Has 7 launch units and 5 engineering units identified to date.

- (1) Headquarters Department
 - Directly Subordinate Work Office
 - Communications Battalion
 - Maintenance Company
 - Anti-Chemical Warfare Company
 - Directly Subordinate Guard Company
 - Engineering Office
- (2) Political Department
 - Organization Office
- (3) Combat Service Office
- (4) 111 Sub-Unit

80304: Technical and Equipment Dept., Site Management Office

80401: 801st Missile Brigade (Nanchao, Lingbo City, Henan)

- (1) Technical and Equipment Dept.
- (2) Technical Section (*Jishu ke*)
- (3) 3rd Launch Battalion
- (4) 2nd Battalion
- Sub-units 216 and 262

80404: Formerly 804 Brigade, now believed to be "First Asia Brigade," located in NW plateau

- (1) Technical and Equipment Dept.,
- (2) 1st Launch Battalion
- (3) Preparation/Transportation Battalion
- Measuring and Testing Battery (at Co. level)
- Control System Platoon
- (4) 1st Battery (Co. level)
- (5) 6th Battery (Co. level)

80413:

- (1) Technical and Equipment Dept., Specialized Equipment Section
- (2) 1st Launch Battalion
- Technical Support Co.

80741: Training battalion

- (1) 3rd Battalion
- (2) Training unit

80742: Support unit, located in western Henan

80743: (Western Henan)

- (1) 2nd Equipment Inspection Station (*zhuangjian, er zhan*)
- (2) Technical and Equipment Office (*chu*, at regiment level)

80744: (Luoyang, Henan)

(moved from Luanchuan, Henan to Luoyang in 1997)

- (1) 2nd Car Rooms (*er che jian*)
- (2) Dispensary

80590: Engineering Technical Unit

- (1) Political Dept.
- (2) Organizational Section
- (3) Logistics Dept.
- (4) Armament Dept.

80591: 1st Installation Regiment, Second Artillery Engineering Technical General Unit (western Henan)

- (1) Sub-unit includes # 13, located in Jingzhou County, Hunan.

80592: 2nd Installation Regiment, Second Artillery Engineering Technical General Unit (Luoyang, Henan)

- (1) 2nd Installation Company
- (2) 5th Company
- (3) Sub-units include 626

80593: 3rd Installation Regiment (engineering technical general unit)

- (1) Processing Company

80596:

- (1) Machine repair shop, and the shop dispensary

Base 55: 80305 (Huaihua, Hunan Province)

-Two launch battalions, one support battalion and one engineering battalion

- (1) Political Department
 - Propaganda Office
- (2) Logistics Department
 - Motor Vehicle Battalion
 - 1st Company
- (3) Anti-Chemical Warfare Company
- (4) Communications Company
 - Telephone Platoon
- (5) Repair Shop
- (6) Cultural Center
- (7) 124 Sub-Unit
- (8) Anti-Epidemic Station
- (9) Qianjing Farm

80305:

- (1) Technical and Equipment Dept.
- (2) Site Management Office

80403: 803rd Missile Brigade, (Jingzhou, Miao-Dong Autonomous County)

- (1) Equipment and Technical Dept
- (2) 2nd Battalion
- (3) Medical Unit
- (4) Technology Battalion,
- (5) Radio Co.

80405:

- (1) 2nd Car Room (*er che jian*)
- (2) Sub-unit 731

80753: Warhead battalion

- (1) 2nd Inspection Station

80504: Engineering Unit (at least one of these units is located at the 55 Base)

- (1) 1st Battalion, 3rd Co, (western Hunan)
- (2) Installation Co.

Base 56: 80306 (Xining, Qinghai)

-Three launch battalions, 2 support units,

80306:

- (1) Technical and Equipment Dept.
- (2) Specialty Equipment Office

80409: (Datong, Qinghai)

- (1) Technical and Equipment Dept.
- (2) Technical Support Office

80412: (Wulan (or Ulan), Qinghai)

- (1) Technical and Equipment Dept.
- (2) Specialty Equipment Office
- (3) Site Management Battalion
- (4) Logistics Dept., Finance Section
- (5) Sub-Unit 122

80431: Experimental or testing unit

- (1) Technical and Equipment Office
- (2) Site Management Section
- (3) 1st Equipment Inspection Station (*jian yi zhan*)

80761 Training battalion

80764

- (1) 2nd Car Room (*Er che jian*)

80310: Storage unit (Baoji, Shanxi Province).

- (1) Technical and Equipment Dept.
- (2) Technical Office
- (3) 1st Office of the Equipment Inspection Station

80435:

- (1) Technical and Equipment Office

(2) Site Management Section

80436:

- (1) Equipment and Management Office
- (2) Railroad Transportation Battalion
- (3) Road Transportation Battalion

80438:

- (1) Second Car Room (*Er che jian*)

80437

80414: 814 Missile Brigade (Yizheng City, Shandong)

- (1) 2nd Technical Support Co.

No location or subordination available for:

80424

80469

80470- (this unit includes a Medical Unit at the Brigade/Regiment level)

80502: (this was an engineering unit noted from 1987-1990 at an UI missile base.

- (1) Engineering section (at regiment level)
- (2) Sub-units of 1st and 6th company

80505

80507 Medical unit, at regiment level

80509

80512:

- (1) Sub-units include 1st and 3rd Company and 3rd Battalion. This unit was reported to have engaged in important national defense construction work in mountains in recent years.

80520: Sub-unit 606

80529: Sub-unit 4th Company

80522:

- (1) Political Office (at regiment level), with sub-unit 634

80597

Hospitals:

Each missile base has an on-site base hospital numbered 531-536. The last digit of the hospital corresponds with the last digit of the missile base and its MUCD.

Post Script

1 March 2001

The October 2000 Revision of Second Artillery Military Unit Cover Designators (MUCDs)

Ellis Melvin and Harlan Jencks

The PLA system of Military Unit Cover Designators (MUCD's, *junshi danwei daihao*) is an operational security measure. It was instituted in the 1950's to provide a minimal level of concealment for the true designations of PLA units and organizations. MUCD's appear in the open press, on unit letterheads, on the signboards of entrances to units' headquarters, on unit buildings such as division hospitals, on scrolls awarded to units, and even on athletic uniforms. Analyses of MUCDs in this open source material can enable foreign analysts to identify units in many articles, aid in identifying unit leaders, help in finding unit locations and movements, and may yield information on individual units' tables of organization and equipment. It is possible in many instances to determine the echelon of an organization from the numbering scheme; identifying an MUCD as army, division, brigade or regiment-level.

Because MUCD's are so widely used, they inevitably become compromised over time. The MUCD system has undergone revisions over the years, most recently in 1975, following its complete compromise during the 'Great Proletarian Cultural Revolution'. Because it was used for so long, the 1975 number scheme was thoroughly compromised.

Natural disasters, such as the floods in 1998, also caused military units to sometimes appear in the clear. This was particularly true in the Shenyang Military Region in civilian news articles about military units fighting the flood in Heilongjiang. The MUCD system that went into effect on 1 Oct 2000 not only remedies the problem of compromised MUCD's in the old system but also remedies problems within the old system caused by changes within the PLA. Under the old system, the abolished Fujian Military Region, Kunming Military Region, Wuhan Military Region and Urumqi Military Region all had their own blocks of numbers. The Air Force was split into two distinct blocks and the General Staff Department and new General Armament Department took over the units that used the old COSTIND block. Three group armies have been abolished, some divisions and their subordinate regiments have been put into the People's Armed Police, downgraded to brigades with the subordinate regiments abolished, or have been made reserve units, or have even been abolished. The intent of the new MUCD system was not only to remedy security problems, but also to reflect the current structure of the PLA.

On 1 October 2000, the MUCD numbering scheme was completely revised for The entire PLA. All GAD units now have new MUCD's in the 63000-series. The Strategic Rocket Force (Second Artillery) has a new set of MUCD's in the 96000-series. While the new Second Artillery scheme is not nearly as transparent as the old one, it has been worked out (mostly) in less than five months, thanks to the availability of a plethora of open source Chinese publications and web sites. Collection was done mostly by SEROLD Hawaii (publishers of the Directory of P.R.C. Military Personalities) and by Ellis Melvin. He and Harlan Jencks collaborated in analyzing the new system, with

assistance from Kenneth Allen and Dennis Blasko. Table 1 presents both the new and old MUCD's for Strategic Rocket Force missile and warhead units, including the launch brigades. Some information on other SRF support units is presented, but these units are still mostly unidentified.

Table 1

Second Artillery MUCDs

Notes: New MUCDs in effect as of 1 October 2000 Old MUCDs in effect 1975
2000

Base/Army-level units in bold

New MUCD	True Name/Designation	Old MUCD
96101	Missile Base 51	80301
96111	Missile Brigade 806	80406
96113	Missile Brigade 810	80410
96115	Missile Brigade 816	80416
96121	UI Support Regiment	
96122?	UI Support Regiment?	
96123?	51 Base Warhead Regiment	80713
96124?	UI Support Regiment?	
96125?	UI Support Regiment?	
96151	Missile Base 52	80302
96161	Missile Brigade 807	80407
96163	Missile Brigade 811	80411
96165	Missile Brigade 815	80415
96167	Missile Brigade 817	80417
96169	UI Missile Brigade?*	
96171	UI Support Regiment	
96172?	UI Support Regiment?	
96173?	52 Base Warhead Regiment	80723
96174?	UI Support Regiment?	

96175?	UI Support Regiment?	
96201	Missile Base 53	80303
96211	Missile Brigade 802	80402
96213?	Missile Brigade 808	80408
96221	UI Support Regiment	
96222?	UI Support Regiment?	
96223?	53 Base Warhead Regiment	80733
96224?	UI Support Regiment?	
96225?	UI Support Regiment?	
96251	Missile Base 54	80304
96261?	Missile Brigade 801	80401
96262	Training Regiment?	
96263	Missile Brigade 804	80404
96265	Missile Brigade 813	80413
96271?	UI Support Regiment?	
96272	UI Support Regiment	
96273?	52 Base Warhead Regiment	80743
96274?	UI Support Regiment?	
96275?	UI Support Regiment?	
96301	Missile Base 55	80305
96311	Missile Brigade 803	80403
96313	Missile Brigade 805	80405
96315	Missile Brigade 814	80414
96321?	UI Support Regiment?	
96322?	UI Support Regiment?	
96323	55 Base Warhead Regiment	80753
96324?	UI Support Regiment?	
96325?	UI Support Regiment?	
96351	Missile Base 56	80306
96361	Missile Brigade 809	80409
96362	Training Regiment?	
96363	Missile Brigade 812	80412
96371?	UI Support Regiment?	

96372?	UI Support Regiment?	
96373	56 Base Warhead Regiment	80763
96374	UI Support Regiment?	
96375	UI Support Regiment?	
96401	Baoji Test & Training Base	80310
96421	Support Unit	
96438	Transport Regiment?	80438
96451	SRF Training Base	80310
96501	UI SRF Army-level Unit	
96512	Subordinate Brigade	
96514	Engineer Regiment in Xinjiang	80552
96516	Subordinate Unit	
96518	Subordinate Unit	
96522	Subordinate Unit in Luoyang, Henan	
96531	UI Engineer Tech General Unit	80590
96542	1st Installation Regiment	80591
96544	2nd Installation Regiment	80592
96546	3rd Installation Regiment	80593
96548	Probable Subord. Regiment	80594?
96552		80596
Unmarked entries have been observed in Chinese publications		
? indicates data deduced from the pattern		

How the System Works: Blocks of Fifty

Second Artillery Headquarters is MUCDs 96000. Units internal to the Headquarters may be numbered 960xx, although none have been reported.

Base/Army-level units, beginning with the Missile Armies, have blocks of 50 numbers, beginning with 51st Missile Army (96101), followed by 52nd Missile Army (96151), 53rd Missile Army (96201), 54th Missile Army (96251), 55th Missile Army (96301), and 56th Missile Army (96351). Missile Armies are followed by other Army-level units, also with blocks of fifty numbers.

Brigade-level units are numbered within their respective Bases/Armies. Missile Launch Brigades use odd numbers only, beginning with the Army MUCD plus ten. Thus, 51st Missile Army controls Missile Launch Brigades 96111, 96113, and 96115.

For the analyst, the good news about the new system is that the MUCD of a Missile Launch Brigade indicates the Army to which it is subordinate (e.g., 9611x brigades all

belong to 51st Army). The bad news is that, in contrast to the old system, the new Brigade MUCDs give no clue as to their true names/numbers. We have to already know (thanks to the old system) that 51 Base controls Brigades 806, 810, and 816.

If the reader finds this system confusing, that is exactly what the Chinese intended.

12. THE INSTITUTIONAL LESSONS OF DISASTER: REORGANIZING THE PEOPLE'S ARMED POLICE AFTER TIANANMEN

By Murray Scot Tanner¹³³⁸

The purpose of this paper is to analyze and evaluate the organizational development of the Chinese paramilitary police forces—the People's Armed Police Corps (*renmin wuzhuang jingcha budui*)—in particular the corps' development and reorganization since the popular demonstrations of 1989.¹³³⁹ After the Beijing leadership's disastrous, bloody mishandling of the demonstrations made martyrs of the students, many in the leadership immediately made scapegoats of the PAP and the regular public security forces—and these forces were universally castigated for their failure to contain and disperse the demonstrators with minimal bloodshed at an early stage of the protests. After Tiananmen, wide-ranging debates broke out among senior Party leaders, police and military officials, over “why the PAP had failed”, what the proper institutional “lessons” of that failure were, and how the PAP should be improved and reorganized to prevent such failures of social control in the future.

Although a good deal of this paper is devoted to describing the PAP's organization, its three central analytical themes concern the following: 1) the internal debates over the various competing “institutional lessons” of the organizational disaster which was Tiananmen; 2) how Chinese leaders have drawn on these perceived lessons to restructure and build the PAP into a powerful, effective, modern, professional paramilitary police force, and; 3) how effective these reforms have been in building up the PAP's new leadership structure, strengthening its political leadership and discipline, and enhancing its personnel, equipment and tactics to transform it into an effective paramilitary corps.

It is hardly a revelation to note that the institutional battles over the PAP that broke out after Tiananmen were powerfully influenced by the “future” political issue of the

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struggle to succeed Deng Xiaoping—and the shifting contest that Jiang Zemin ultimately won over the likes of Yang Baibing, Qiao Shi and others is a crucial thread running through the story of the PAP over the past decade. But the institutional spectre of the past was no less important. Dating back to the early 1930s the Chinese Communist Party (CCP) has witnessed a long, tense, and occasionally bloody institutional struggle over which of three powerful organizational systems should control the CCP's various paramilitary forces—local Party (and later government) leaders, the Party-state's intelligence and public security forces, or the People's Liberation Army (PLA). The institutional fears and prejudices of those historical struggles have exerted a powerful impact on the post-1989 reorganization, and helped determine the organizationally ambiguous compromise leadership system that has emerged after 1995. To set the stage for the changes that follow, this chapter begins with a brief organizational history of the CCP's paramilitary forces from the 1930s to the formal reorganization of the new PAP in 1983, stressing the constant tension among local Party leaders, intelligence-police officials, and the PLA that produced an almost incessant series of reorganizations between 1949 and 1983.

Most journalistic analyses of the PAP's reorganization since 1989 have caricatured it as somewhere between a complete PLA take-over and a transformation of the PAP into Jiang Zemin's personal million-man Praetorian Guard. This chapter by no means disputes that both the PLA and President Jiang have greatly strengthened their influence over the PAP. But a careful review of the available evidence of the PAP's organization reveals a leadership system that is much more complex, stratified, and balkanized than the image of "PLA take-over from the public security system" suggests. Most importantly, local Communist Party Secretaries and governments at the provincial, prefectural and county levels retain significant influence over the PAP—its use and deployment, its funding and logistics, and very possibly its lower level leadership as well. To be a successful leader, Jiang Zemin must keep the support of the PLA; but provincial Party leaders are no less vital a support base for him (particularly financially), and he has fashioned a PAP system that in vital ways protects their interests as "prefects" over their regions. The public security system has, without question, been the biggest loser in the ten-year struggle to control the PAP. But the police have clung to a good deal of control over several portions of the PAP that are vital to several of its missions, and even retains some capacity to command PAP anti-riot forces in combined police-PAP operations.

This chapter will begin by sketching out PAP organizational development to 1989. It will then examine the impact of the Tiananmen disaster. In the institutional development of any nation's security forces, one of the key processes is the highly politicized battles that occur over how to interpret the proper "institutional lessons" to be drawn from key battles over social order control. Next, this chapter will briefly sketch the battles over these lessons that followed Tiananmen—breaking these debates down analytically into three major categories: 1) the PAP's leadership and command structure; 2) the PAP's political-ideological work and loyalty, and 3) a variety of technical and logistical issues including manpower, budgets, weapons and tactics. In turn, this chapter will then analyze and evaluate how the PAP has been reorganized and restructured to try to strengthen it in each of these three categories. The conclusion will attempt an overall evaluation of the PAP's changes since 1989.

ORGANIZATIONAL HISTORY TO 1989

The roots of the tensions among Party secretaries, police-intelligence officials, and the PLA over control of the paramilitary forces date back to shortly after the CCP's flight from the cities in 1927.¹³⁴⁰ The scattered revolutionary groups organized numerous paramilitary policing units to police cities seized in uprisings (such as Nanchang), pacify base areas, guard senior leaders and key meetings, and carry out intra-party purge operations. Their organizational structure increasingly reflected the emerging divide between the fledgling Red Army and the intelligence services that were increasingly modelled on Stalin's NKVD. In the Jiangxi Soviet, the Ministry of Public Security's (MPS) infamous predecessor, the State Political Security Bureau (SPSB), established its own powerful paramilitary units that undertook a number of brutal operations against other Red Army and Party units during the intra-Party purges of the early-mid 1930s.

¹³⁴⁰ The author has analysed many of the early organizational battles over the history of the CCP intelligence and police organs in "Who Wields the Knife? An Historical-Institutional Analysis of Chinese Communist Police and Intelligence Organs, 1927-1950" (ms. forthcoming). Much of the analysis in this section draws on this paper, which is available from the author. Unless otherwise noted, the information in this organizational history is derived from the following several sources: Liu Shaohua, "Wujing Budui: Zhongguo baiwan teshu wuzhuang [The PAP Corps: China's One Million Man Special Armed Force], *Guang jiao jing* [Wide Angle Mirror], April 1998, pp. 42-47 (hereafter *Guang jiao jing*); Yan Li, Li Zhao, and Wang Zhimin, eds., *Zhongguo gongan yewu quanshu* [China Public Security Professional Encyclopaedia], Beijing: Zhongguo renmin gongan daxue chubanshe, 1996 (hereafter ZGGAYWQS), esp. pp. 1302-1304; Zhou Yushu and Xu Shouceng, "Fayang guangrong geming chuantong, baochi zhongcheng weishi bense, jianshe juyou youliang junzheng suzhi de wujing budui [Develop its Glorious Revolution Tradition, Defend its Basic Nature as a Loyal Guard, Construct an Armed Police Corps Possessing Excellent Military and Political Qualities], in Li Junting and Yang Jinhe, eds., *Zhongguo wuzhuang lilian tonglan* [An Overview of China's Armed Forces], Beijing: Renmin Chubanshe, 1992, pp. 48-64 (Hereafter "Zhou Yushu"); *Junqi piaopiao* [The Military Flag Flutters], Beijing: Jiefangjun chubanshe, 1999, pp. 646-662; Du Shuyun, "Zhongguo tese de wuzhuang jingcha budui [An Armed Police Corps with Chinese Special Characteristics], in Chinese Police Society, ed., *Lun Zhongguo tese de gongan* [On Public Security with Chinese Special Characteristics], Beijing: Qunzhong chubanshe, 1998, pp. 121-129 (hereafter Du Shuyun); Wang Jianying, ed., *Zhongguo Gongchandang zuzhishi ziliao huibian: lingdao jigou yange he chengyuan minglu (zengding ben)* [Compendium of Materials on CCP Organizational History: Namelists of the Evolution and Membership of Leadership Organs (Expanded Edition)], Beijing: Zhonggong zhongyang dangxiao chubanshe; *Zhongguo renmin jiefangjun de qishi nian* [Seventy Years of the Chinese People's Liberation Army], Beijing: Junshi kexue chubanshe, 1997, esp. pp. 627-628; *Zhongguo renmin gongan shigao* [Draft History of Chinese People's Public Security], Beijing: Jingguan jiaoyu chubanshe, 1997 (hereafter *Gongan shigao*).

Years later, Marshal Peng Dehuai and other PLA leaders bitterly recalled the damage these paramilitary intelligence units wreaked on thousands of loyal Party and army members. Official Party and police history still criticizes the SPSB for its excessive centralization and vertical leadership (*chui zhi ling dao*), for infiltrating and spreading terror within the Party and army, and for becoming “divorced” from the leadership of local Party committees. Strong evidence indicates that these charges were overstated, but the organizational suspicions and official “lessons” they created endured. From 1939 forward to the present the Party has firmly rejected the NKVD/KGB organizational model, and firmly subordinated public security units to local Party secretaries and governments at all levels. The SPSB’s successor, the Central Social Affairs Department (SAD) also established paramilitary units, including the Central Guards Regiment that protected the Party leadership.¹³⁴¹ But the establishment of independent paramilitary security corps within numerous Red Army units during the 1940s very likely reflected the Red Army commanders’ lingering concerns about these Party-state security troops.

At the risk of oversimplifying, after 1949 these three groups perceived the paramilitary forces very differently. Local secretaries, who are evaluated in large measure on the management of social order and success of campaigns in their regions, want quick, unfettered access to the paramilitary forces in their regions for a variety of security, civil defence, and other coercive missions (and, increasingly, as sources of employment). Moreover, since local governments have historically been responsible for a large part of the budgets of these forces, they feel entitled to use the forces they help pay for. Public security officials want to be able to activate paramilitary forces to quell disturbances, apprehend armed criminals, and perform other duties without having to wait for the approval of distant military units. Another enduring desire of many police officials has been to forge a more centralized, professional paramilitary force well-versed in police investigatory work, under public security leadership, and less subject to unprofessional abuses by local Party and government officials. Control of paramilitaries by the PLA has usually been perceived as a source of unified vertical discipline of a type not possible under China’s public security system, stricter training and better equipment budgets. But in periods when professionalism has been stressed in the PLA, the army has sought to distance itself from the paramilitaries’ social order, economic construction, and civil defense missions. These forces have also been seen as a sap on PLA funding and training time.

These cross-pulling institutional tensions led to near-constant reorganization of the paramilitary forces between 1949 and 1983. The PAP has shifted back and forth among four different leadership systems since 1949. These include “vertical leadership” (*tiao tiao ling dao* or *chui zhi ling dao*) under the military system, “horizontal” or “local leadership” (*kuaikuai ling dao*) under the public security and local Party Committee

¹³⁴¹ On the SAD’s leadership of the Central Guards Regiment at Yanan, see the memoir article by former SAD Secretary General Luo Qingchang, “The Spirit of Serving the People Will Shine Forever”, *Renmin ribao* (RMRB), 5 September 1994, p. 5, in FBIS.

systems, management divided between military and public security (*tiaokuai fenge*), and “dual leadership combining vertical and horizontal” (*tiaokuai jiehe, shuangchong lingdao*).¹³⁴²

The Communist Party's return to the cities in 1948-49 greatly expanded the need for paramilitary units to establish a transitional armed police presence, ensure leadership security, and undertake counterrevolutionary suppression. In September 1949 the Central Military Commission (CMC) established the Chinese People's Central Public Security Column (*zongdui*). Wu Lie, who headed the SAD's Central Guards Regiment (CGR) in Yanan was appointed Commander and Zou Yan was named Commissar. One official source reports that the Column was “subordinate to the Ministry/Department of Public Security” (*Gongan Bu*), although this probably refers to the transitional department established under the CMC in mid-1949 rather than the state police ministry established later that year.¹³⁴³ The Central Column initially consisted of two divisions and one regiment, and, like the CGR, its duties included guarding Central leaders and leadership meetings, and helping to maintain social order in the capital. It reportedly provided meeting site security for the first meeting of the People's Consultative Congress, the founding ceremony for the PRC, and assisted Li Kenong and the other SAD leaders in guarding Mao Zedong and Zhou Enlai during their trips to the Soviet Union.

Initial efforts to reorganize and standardize the various paramilitary forces under Social Affairs/Public Security and PLA leadership began at the winter 1949 first National Conference on Public Security Work. Initially, control was ceded to the public security units, and over the next five months, SADs/Public Security Bureaus (PSBs) at all levels gradually took over and reorganized the units within their regions. The new forces were now called “The Chinese People's Public Security Corps” [PSC] (*Gongan Budui*). In addition to the Central Column units noted above, these widely scattered forces included three Public Security Divisions (*shi*), twelve Public Security Regiments (*zongdui*), one Public Order Regiment (*jiucha zongdui*), one Guards Regiment (*jingwei tuan*), three provincial Regiments (*tuan*), and “several” battalions, *zhongdui*, and *dui*.¹³⁴⁴

¹³⁴² Du Shuyun, “Zhongguo tese de wuzhuang jingcha budui,” p. 123.

¹³⁴³ Zhou Yushu, p. 53. Zhou also claims that this unit was established in August, not September, under “Public Security Ministry/Department” (*Gongan Bu*) Leadership. This apparently refers to the transitional “Public Security Department” (*Gongan Bu*) established under the Central Revolutionary Military Council on July 6, 1949 on the basis of the former CCP North China Bureau and Central Social Affairs Departments (with Luo Ruiqing as Department Chief). The state Ministry of Public Security (also *Gongan Bu*) was not officially formed out of the Party's former Social Affairs Department (SAD) until after October 1 (apparently Oct. 19). The changeover from Party SADs to state Public Security Bureaus (PSBs) varied from place to place, based on the timing of liberation, and according to some sources regional and local SADs continued to exist as late as 1951 or 1952. See *Gongan shigao*, esp. pp. 189, 216, 243-249.

¹³⁴⁴ Zhou Yushu, pp. 53-54.

Separately, the Public Security/Social Affairs departments also began to establish Border Management departments and corps.

The early efforts at reorganization were pulled in opposite directions by the desire for a unified, standardized corps, on the one hand, and the demands of local flexibility and power consolidation, on the other. As early as the end of 1950, China was beginning to see the emergence of a tripartite division of paramilitary duties that would have enduring influence down to the present day, comprised of: 1) the more centralized and militarized forces at Center and at the level of the large Military Regions (MRs); 2) the local Party/Public Security-controlled paramilitary police forces, and; 3) the Central/Provincial public security-controlled Border Defense forces. In September 1950, the Central People's Government and the CMC began trying to unify and standardize the leadership, manpower allotments (*bianzhi*), unit designator codes, supply systems and weaponry of these units under the new name of the Liberation Army Public Security Corps (*Jiefangjun Gong'an Budui*). Minister of Public Security Luo Ruiqing was appointed Commander and Chief Commissar, with Cheng Shicai as Deputy Commander, Wu Lie as Chief of Staff, Li Tianhuan as Deputy Commissar and Ouyang Yi as Political Bureau Chief. The "regular" units at the Center were subordinate to the CMC's Public Security Headquarters (*junwei gongan silingbu*). The leadership of these forces was strengthened by the reassignment of a number of troops from the PLA 20th army corps (*bingtuan*).

To further unify military command over the Central and MR-level forces, the CMC in September established vertical leadership structures similar to the rest of the PLA, with General Staff, Political Work, Logistics, and Cadre Management systems. Next, corresponding leadership organs were established in the Central-South, East China, Northeast, Northwest, and Southwest Military Regions, and in the Railway Public Security Corps (reflecting the capital's sensitivity, the Beijing and North China units remained under the direct control of the CMC Public Security Headquarters).

But for forces below this level, power was being decentralized. A December 1950 CMC/Government Affairs Council joint order placed PSC forces at the provincial and prefectural levels and below under the local Party and government organs at the same level. PSC Headquarters offices within the local Public Security Bureaus commanded these forces and were responsible for their military training, administration and personnel management, and political work.

The third portion of the system, the Border Defense forces, apparently remained independent of the MRs, under Public Security control.¹³⁴⁵ Public security control over much of the border management portion of the armed police corps gradually became established as a tradition, even during most periods when the PLA has dominated this corps. Though the available sources give no direct explanation of this, such an arrangement certainly facilitates merging border inspections with two of the police's other principal organizational duties: residency management and the issuance of passports

¹³⁴⁵ *Zhongguo gongan yewu quanshu* (ZGGAYWQS) p. 1303; Zhou Yushu pp. 55-56; and *Guang jiao jing*, p. 43.

and visas.

Nonetheless, one official military analysis—reflecting a classic military critique of civilian police control over paramilitary forces—has criticized the tripartite organizational structure that emerged at this time. The author argues that even though the system was convenient for carrying out local public security operations, its organization and chain of command were insufficiently unified and smooth, and the locally controlled Public Security Corps “were lacking in strict management.”¹³⁴⁶ In response to such problems, beginning in September 1951 the CMC and the MPS began issuing a series of orders to further unify military control over the PSC, making all internal guards, border defense, and local PSC units’ part of the PLA/PSC. The entire corps was incorporated into the military system with a unified vertical command system.

According to one well-researched Hong Kong account, by late 1951 the “regular” PSC corps under Central and MR leadership was organized into 20 divisions (*shi*) and three regiments (*tuan*), with a total manpower of 188,000. In addition, the PSC included some 322,000 troops under local public security control, for a nation-wide total of 500,000 men. Of the 20 regular divisions, four were Beijing-based infantry divisions that were converted into the Central Public Security Guards Division (*zhongyang gongan jingwei shi*), plus three Public Security Divisions. The rest of the forces were distributed among the Northwest Region (two divisions), the Southwest (three divisions), the Central South (four divisions), the Northeast (one division), the Nanjing/East (*ningdong*) region (five divisions), and the Railway Security Corps (two divisions and three regiments)¹³⁴⁷

A new CMC plan for the corps, signed by Mao in January 1952, attempted to further centralize PLA control over the PLA/PSC’s corps-building system, order of battle, units designators and personnel allotments.¹³⁴⁸ It also attempted to clarify leadership relations and the supply system. The total corps, which had apparently swelled in size, was now greatly streamlined (one source states that the total force was reduced from 630,000 to 580,000 troops. Another states the new number was about 100,000 troops, though this probably refers only to the “regular” forces).¹³⁴⁹ To smooth relations with Public Security units, however, the local PSB chiefs at all levels were designated the political commissars of local PSC units. Perhaps more importantly, all PSC units were ordered to establish a system of Party Committees (*dangwei*), and PSC Party Committees at prefectural and county levels were principally under the leadership of the local CCP Committee. Since local PSB chiefs by this time were also increasingly under the control of local CCP Committees, this would suggest that in the case of the PAP, the PLA’s historical tensions between commander and commissar would have resonated as a

¹³⁴⁶ Zhou Yushu, pp. 53-54. The fact that PAP Commander Zhou restated this classic argument for military centralization of the PAP just two years after Tiananmen suggests it is hardly of mere historical interest.

¹³⁴⁷ Guang jiao jing, p. 43.

¹³⁴⁸ Zhou Yushu, p. 54.

¹³⁴⁹ Guang jiao jing, p. 43; Zhou Yushu, p. 54.

cleavage between the vertical military influence of PAP commanders and the horizontal influence of local Party Committees.

Official historiography stresses that by 1955 the PRC's "changed circumstances" encouraged yet another reorganization of the corps—in particular, the CCP had successfully consolidated control over social order and China's borderlands, land reform had succeeded, the economy had recovered, and a surprisingly smooth socialist transformation had been achieved in agriculture and industry. The simultaneous moves for PLA professionalization and the strengthening of state legal organs throughout the system formed the backdrop for the Party Center, State Council and CMC to order a reorganization of the PSC.

In July 1955 the Ministry of Defense transformed the Central, MR and provincial/municipal-level PSC units into the "PLA Public Security Army" (*gongan jun*), and named it one of the PLA's five main armies. All units, leading organs and training institutes underwent a corresponding name change. Provincial-level PSC leadership organs were abolished and provincial MRs began simultaneously to serve as "Public Security Headquarters" (*gongan silingbu*). Key border guard units were subordinated to the MR system. By the end of 1955 the Public Security Army totalled 400,000 troops nation-wide, including several Internal Guards divisions, Garrison divisions, and Border Defense Main Posts (*zong zhan*).

At the same time, the PSC units at the Special District (prefectural) and County levels were returned to the control of local governments and Public Security Bureaus, and were transferred from PLA personnel allotment (*bianzhi*) to public security *bianzhi*. These units were renamed, for the first time in PRC history, as the "People's Armed Police." The MPS and provincial PSBs established PAP Bureaus or Offices. One public security source states that with the reassertion of local public security control over prefectural and county PAP units, "the system had basically returned to what it had been before 1952."¹³⁵⁰

In the wake of the Eighth Party Congress' call to streamline the military and improve its quality, the CMC in January 1957 convened an expanded meeting that decided to reduce the PLA's "five major armies" to three. In September, the Public Security Army's unit designation was abolished, and it was temporarily transformed into the "Garrison Department" (*jingbei bu*) under the General Staff Department. Luo Ruiqing, however, remained as Commander and First Commissar, and Li Tianhuan continued in the chief of staff role, now called "Department Chief" (*buzhang*). Between March and August the Public Security Army's leading organs at the military region level were also abolished.¹³⁵¹ A few of the PSA divisions were handed over to the provincial military regions or to urban garrison commands, while many of the local units guarding

¹³⁵⁰ Zhongguo gongan yewu quanshu, p. 1303.

¹³⁵¹ Zhou Yushu (p. 55) notes that the Beijing, Shenyang, Jinan and Lanzhou MRs established Garrison Offices (*jingbei chu* or *weishu qinwu chu*) in lieu of the PSA offices, while the other MRs ran their internal guards units from their Warfare or Intelligence Departments.

detention centers reverted to the control of local PSBs.

Beginning in early 1958, the wholesale decentralization of power to local Party Committees that accompanied the onset of the Great Leap Forward accelerated this most recent reorganization of the PSC, prompting its return to local Public Security control. In August the Party Center approved the CMC's "Report on the Question of Reorganizing the Public Security Corps". By year's end, the entire Corps was renamed the "People's Armed Police." The GSD Garrison Department, barely a year old, was closed and merged with the Ministry of Public Security's Sixteenth Bureau to form a new MPS Fourth Bureau responsible for the PAP. But overall, the system was organized along local leadership (*kuaikuai lingdao*), not Ministry of Public Security leadership. Provincial and local PSBs formed their own Armed Police Corps and took charge of the internal guard units responsible for guarding prisons, most factories, ports, schools, and even the borders with other socialist countries. The PLA, however, kept control over the internal guards units responsible for Central and provincial bodyguard duty, disaster relief, important factories and bridges, and sensitive ports and international borders.¹³⁵²

In the wake of the Great Leap Forward disaster, a partial recentralization and remilitarization of the forces was undertaken in November 1961. As in 1951-52, strengthening leadership and discipline was given as a justification. The Party Center established a dual public security-military leadership system. The CMC and PLA general departments took charge of all corps-building activities, but police professional work and all public security duties and operations were led by public security organs. The PAP also remained within the public security system. In December, the State Council appointed a new PAP leadership. Continuing past practise, recently appointed Minister of Public Security Xie Fuzhi was jointly appointed Commander and Chief Commissar. However, Luo Ruiqing's longtime subordinates Li Tianhuan and Wu Lie remained, now as Second Commissar and Chief of Staff. The fact that Premier Zhou Enlai (and not Mao as CMC Chairman) officially signed these appointments suggests that PAP cadre management also remained primarily within the state (e.g. public security) system rather than the military system. In February 1963 the PAP was again renamed the Chinese People's Public Security Corps, though no further reorganizations were undertaken at that time.

On the eve of the Cultural Revolution, in February 1966, Mao personally ordered yet another reorganization of the PSC, and by July it had been abolished as an independent unit. Its leading organs were placed under the control of the PLA's Second Artillery. Not surprisingly, its official leadership lines became more confused than ever. Official military and public security sources indicate that the PSC was now within the infantry system, and that nation-wide its subordinate forces were "under the leadership of provincial military regions system". Many units were reorganized as "independent divisions, regiments, companies, etc. and county-level *zhongdui*." These fell under the leadership of the provincial military regions and municipal garrison commands. Former PAP Commander Zhou Yushu, however, insists that these forces were still under the

¹³⁵² *Zhongguo gongan yewu quanshu*, p. 1303; and Zhou Yushu pp. 55-56.

Party Center's unified leadership and the "dual leadership of the military system and local Party Committees", and that in their guard and public security duties they remained under the command of local public security organs.

As with the public security organs and the PLA as a whole, the twisted tale of the PSC's collapse during the Cultural Revolution would require a separate book to analyze. As the political-legal organs came under attack and were ultimately destroyed between 1966-68, the various local PSC units seem to have been absorbed by a variety of competing local military units. In Beijing, for example, the CMC ordered the PSC taken over by the Beijing Garrison Command.¹³⁵³

The reorganization of the current People's Armed Police Corps occurred in stages from 1979-85, and was driven by a number of forces. From a military perspective, the PAP's reformation reflected Deng's desire to streamline and rectify a bloated PLA that was involved in far too many aspects of government and society. From the public security perspective, this move must be seen as part of a much broader effort to reorganize, civilianize, and professionalize internal security, intelligence, and legal coercion.¹³⁵⁴ One of the first steps toward forming the new PAP was the gradual reassertion of the public security system's traditional leadership over border management. The April 1979 National Border Defense Work Conference was called to readjust border security to meet the needs of the new "open door" policy. By the end of the year the State Council and CMC had approved a greater unification of the Central and local border security armed police forces, under the leadership of a new MPS Border Defense Security Bureau (holding the rank of an Army) and similar organs under provincial PSBs.

The major transfer of paramilitary units occurred in June 1982, in response to an MPS request for a full-scale reorganization of the armed police. The State Council and CMC ordered control over the PLA's Internal Guards Duty Forces and the various local PLA units assigned to internal security work transferred to the Public Security departments. These included most of the garrison units from Beijing and many major cities, many of which had been transferred from public security units to the PLA during the early GPCR. Indeed the PAP's new commander, Li Gang, was the former Beijing Garrison Vice-Commander.¹³⁵⁵ These units were soon combined with the original public security active service border defense, armed police, and fire-fighting units to form

¹³⁵³ *Zhongguo gongchandang beijingshi zuzhishi ziliao*, 1921-1987, pp. 778, 784-5.

¹³⁵⁴ This complex process was much more than just a strengthening of the public security forces at the expense of the regular military. Only one portion of this was the post-Cultural Revolution removal of a vast array of civilian functions from PLA control. During the same period (1979 to 1983), the Party leadership also removed a number of judicial functions from public security control (reestablishing the procuracy and handing over most of the prison system to the revived Ministry of Justice system); and transferring civilian intelligence work from the Party to the state (converting the Central Investigation Department to the Ministry of State Security).

¹³⁵⁵ *Xinhua*, 27 April 1983, trans. BBCSWB.

the new People's Armed Police Corps, which was formally established on April 5, 1983.¹³⁵⁶ Over the next two years--in part due to the million man cut in the PLA--several specialized security units from the PLA Capital Construction Corps (for Gold, Water & Electric Power, and Transportation), and the Armed Forestry Police were also absorbed into the PAP. The PAP Headquarters, plus special bureaus for Guards (*jingwei*) work, Border Defense, and Fire-Fighting were established within the Ministry of Public Security to oversee some of these specialized units.¹³⁵⁷

Officially, the new PAP was under the joint unified leadership of the Party Center, State Council, and CMC; it was simultaneously regarded as "one of the armed forces (*wuzhuang lilian*) of the Party and state" (along with the PLA and militia) and "a constituent part of the public security departments". Its Main Corps (*zongbu*) was organized under the MPS, and the PAP personnel allotments and finances were both "under the unified management of the MPS PAP Main Corps."¹³⁵⁸ Reflecting its public security leadership the PAP was, and still is, organized according to state administrative units rather than large military regions. In fact, the sources reviewed for this paper indicate no PAP presence at the MR level, though occasional reports suggest the MR's may have some role in PAP training.¹³⁵⁹ Reportedly, the PAP Main Headquarters originally held a "deputy military region" (*fujunqu*) military rank, and during the mid-1990s was promoted to the full MR (*zhengjunqu*) level.¹³⁶⁰ Provincial-level PAP "General Corps" (*zongdui*) initially held the rank of a division (*shi*), although since the PAP Main Headquarters' promotion, an unspecified number of these units have reportedly been promoted to the "deputy military region" rank. PAP units at the provincial, prefectural/municipal, and county levels were under the leadership of local Party Committees and Public Security departments, and superior level PAP corps. The system was called "unified planning, with management and command divided by levels" (*tongyi guihua, fenji guanli, fenji zhihui*), indicating strong local Party Committee and public security control, especially over the crucial area of personnel hiring, dismissal and promotion. The PAP corps combined forces under conscript and voluntary service, and

¹³⁵⁶ *Gongan shigao*, pp. 413-414.

¹³⁵⁷ *Guang jiao jing*, p. 44.

¹³⁵⁸ *Gongan shigao*, p. 414; *Zhongguo renmin jiefangjun de qishi nian*, p. 628 on budget and *bianzhi*.

¹³⁵⁹ An interesting indication of this point is the "Rules on the Use of Force to Cope with Turmoil and Riots" issued by the NPC Standing Committee, CMC and State Council in early January 1994. These rules were relayed to provincial-level public security and PAP units, provincial military districts and party committees of garrison commands—but not to the large MRs. See *Cheng ming*, 1 March 1994, p. 21.

¹³⁶⁰ The rank is cited in *Guang jiao jing*, pp. 45. This rank is strongly suggested by protocol evidence. In recent years when the PAP Headquarters is cited in official press it is usually grouped with the Military Regions.

was supposed to follow PLA rules and regulations.¹³⁶¹ PAP forces were also supposed to enjoy the same salaries, benefits and treatment as regular PLA forces, which would in principle place them on a somewhat higher scale than regular public security forces.¹³⁶²

The basic organizational structure of the PAP laid down at this time largely endures today, and is summarized in Table 12.1 (below). Equivalent PAP and PLA units are summarized here.

Table 12.1 Basic Organizational Structure of the PAP

State Administrative Unit	PAP Unit	Equivalent PLA Unit
Central Province (inc. Autonomous Regions and Directly Administered Cities)	Main Corps (<i>zongbu</i>)	Military Region (<i>zheng junqu</i>) ¹³⁶³
	General Corps (<i>zongdui</i>)	Some: Dep. Milit. Reg (<i>fujunqu</i>) other equal to a Division (<i>shi</i>) ¹³⁶⁴
Prefecture/Municipality County	detachment (<i>zhidui</i>) battalion (<i>dadui</i>) or company (<i>zhongdui</i>)	regiment (<i>tuan</i>) ¹³⁶⁵ battalion (<i>ying</i>) ¹³⁶⁶ company (<i>lian</i>) ¹³⁶⁷

Although nearly all available sources currently estimate the total PAP Corps at approximately one million men, accurate and complete estimates of the total number of PAP detachments (*zongdui*) in each province are not possible on the basis of the available evidence.¹³⁶⁸ Several official sources state that during the 1980s and 1990s, "each"

¹³⁶¹ Gong'an shigao, p. 414; Zhongguo renmin jiefangjun de qishi nian, p. 628 on budget and bianzhi.

¹³⁶² Back to the early years of the PRC, the official standard for public security forces has been that they should enjoy salaries, benefits and treatment "a bit higher than other administrative cadres in the area, and a bit lower than the PLA."

¹³⁶³ Equivalent PLA ranks, *Guang Jiao Jing*, p. 44.

¹³⁶⁴ Ibid.

¹³⁶⁵ Ibid.

¹³⁶⁶ Ibid.

¹³⁶⁷ Ibid.

¹³⁶⁸ Tai Ming Cheung, "Guarding China's Domestic Front Line: The People's Armed Police and China's Stability" *China Quarterly*, No. 146, June 1996 p. 525-547. Page 531 provides data culled from *Renmin wujing bao* [People's Army Police] for nine provincial level General Corps, circa 1995.

government administrative unit from the Center to the country-level has established its own PAP units. Since most of these were established during the period of public security leadership of the PAP, we might, in principle, want to use the total number of public security departments at these various levels as a very rough base from which to start making estimates of PAP units. These figures are available for 1995 from internal Public Security sources:

Table 12.2 Public Security Departments by Geographical/Administrative Level (1995)¹³⁶⁹

<i>Provincial level</i>	30
<i>Prefectural/Municipal level</i>	345
<i>County level</i>	2,845

But the total number of PAP units is far more complex than a simple function of the total number of public security or other government administrative units at these various levels. As in most countries, police resources in China are terrifically skewed by region, and local government administrative units vary greatly in terms of the number of police units they are authorized or can afford to establish within their territory. Regular public security police and PAP concentrations (relative to population) are much higher in densely populated cities, wealthier regions, and politically or ethnically "sensitive" regions. The Central government has devoted massive resources to ensuring the capital's security; Beijing was until recently the only provincial-level unit in China with more than one PAP General Corps (*zongdui*) (the second, created by the transfer of martial law PLA forces to the PAP in 1989, was merged with the original *zongdui* in 1999), and the capital enjoys a ratio of regular public security police to citizens that is almost fifty percent higher than the second most densely policed city (Shanghai).¹³⁷⁰ Provincial level General Corps, moreover, are not only in charge of the PAP units under lower-level

¹³⁶⁹ Ministry of Public Security Public Security Research Institute, comp., *Qicao renmin jingchafa cankao ziliao xiexuan* [Selected Reference Materials for Drafting the People's Police Law], Beijing: Qunzhong Chubanshe, 1997, p. 3.

¹³⁷⁰ On the two Beijing PAP *zongdui*, see the meticulous account by Dennis J. Blasko and John F. Corbett, Jr., "No More Tiananmens: The People's Armed Police and Stability, 1997," *China Strategic Review*, Volume III, Issue 1, Spring 1998, pp. 80-103, esp. pp. 81. For more recent confirmation, see the 1998 article authored by an officer in the Beijing No. 2 *zongdui* in *Renmin wujing bao*, 1 August 1998, p. 3. I am grateful to Dennis J. Blasko for noting their recent merger to me in a personal communication, July 2000. In 1995 the ratio of public security police per 10,000 citizens in Beijing was 35:10,000, in Shanghai it was 26.9:10,000, in Tianjin 23:10,000, and the falloff from there to other regions is dramatic. This data is from the internal circulation volume *Gongan renshi guanli* [Public Security Personnel Management], Beijing: Qunzhong chubanshe, 1998, pp. 67-68.

government administrative units within their territory (e.g. the various prefectural *zhidui* and county *zhongdui* and *dadui*), they also command a number of directly subordinate detachments that are not tied to lower-level administrative units. Other sources note, moreover, that some county-level PAP corps have established a single PAP battalion or company, while others have several.

For Western analysts, one PAP organizational issue of great interest has been the buildup of PAP numbers through the transfer of several divisions of PLA forces since the mid-1990s. By meticulously analyzing a new series of four-digit PAP unit numbers (all between 8610 and 8750), and examining the PLA career backgrounds of several officers within these units, Blasko and Corbett have provided convincing evidence that by late 1996, fourteen new division-sized units (probably numbering around 150,000 troops) were very likely converted *en masse* into new PAP divisions (equivalent to *zongdui*). In addition to the more obvious motivation of beefing up the PAP's internal security capacity, these authors argue that the transfer would have permitted to PLA to reduce its redundant manpower substantially by hiving-off presumably inferior troops onto the PAP, where much of their budget would come from non-Central, non-PLA sources.¹³⁷¹ A variety of subsequently published PLA and PAP sources indicate that at least several of these units have become PAP mobile divisions, and they have been stationed in a number of locations around the country, including Xinjiang, Hebei, Yunnan, and the Chengdu Military Region.¹³⁷²

Tiananmen and Struggles Over Its Lessons

Inevitably, in the wake of the crisis, waves of conflicting analyses were put forward as to why the PAP and public security forces failed to maintain control over the demonstrators, why the PLA-led suppression was so bloody, and how the paramilitary police corps should be reorganized to prevent future such disasters. Just as inevitably, from the very start these "professional" debates over strengthening the PAP were intertwined with longstanding institutional struggles for control of China's various security forces, and with leadership succession politics.

Analytically, these arguments over how best to strengthen the PAP can be usefully broken down into three major categories: issues of political work, loyalty and ideology; issues of organization and command structure; and issues of equipment, budgets and training. At the same time, it will become clear that a number of these categories are tightly intertwined. For example, the seemingly distinct issues of how to strengthen Party leadership, how to tighten military command structures, and how to guarantee adequate budgets all reflect one of the most persistent debates in CCP security history: is it best for internal security forces be controlled "vertically" by security "professionals", or "horizontally" by local Party and government "generalists".

A wide array of powerful critiques swirled around the failure of political-

¹³⁷¹ Blasko and Corbett, "No More Tiananmens", esp. pp. 82-87.

¹³⁷² The source of this information is various reports from *Liberation Army Daily*, *People's Armed Police Daily*, and other PLA publications.

ideological work in the PAP and public security forces. At the level of ideology and social order strategy, debate raged over whether or not police leaders had made an ideological error in underestimating the “planned, conspiratorial nature” of the demonstrations. In the spring of 1989 senior Public Security officials had criticized local police officials in Nanjing for their excessively harsh handling of recent student demonstrations, charging that they turned a small problem into a major one.¹³⁷³ After Tiananmen, hard-line police, intelligence and military officials countered that the police had been far too tolerant and “soft-handed” in dealing with the Beijing crowds. Referring to pre-1989 internal debates on police reform, they also hammered reformist political-legal leaders for who had argued that during the reform era, class enemies were less of a threat, and the “weapon of dictatorship” needed to be weakened or used less.¹³⁷⁴ Many critics also charged that the failure of ideological training had also contributed to demonstrations by making the masses angry at public security and PAP forces that were corrupt, greedy, and indifferent.

At the level of organizational ideology, debates raged over whether or not the PAP possessed the “unconditional” ideological commitment to the Party leadership and the military-style discipline necessary to put down such popular demonstrations. These forces had been far too susceptible to appeals from the demonstrators, and far too slow to follow orders to suppress them. Speaking several months after the crisis, Minister of Public Security Wang Fang conceded that “there is no denying” that ideological work in the corps had suffered greatly in recent years—but he quickly laid the blame for this mistake squarely at the feet of the regime’s newest designated scapegoat, reformist ex-General Secretary Zhao Ziyang. Wang Fang insisted that making ideological and political work more “revolutionary” and strengthening Party loyalty and Leninist discipline was *the most important change* required in the wake of Tiananmen.¹³⁷⁵

The collapse of European Leninism between 1989 and 1991 provided hard-line

¹³⁷³ This was at the National Political-Legal Work Meeting. See MPS Vice Minister Yu Lei’s speech published in *Renmin ribao*, cited by *Reuters*, 24 January 1989; also Qiao Shi’s speech excerpted in *Shehui zhi’an zonghe zhili zhengce fagui huibian* [Collected Policy Documents on the Comprehensive Management of Social Order] Beijing: Qunzhong chubanshe, 1992, p. 60

¹³⁷⁴ The author has analyzed internal debates over public security policy during this period in Murray Scot Tanner, “Ideological Struggle Over Police Reform, 1988-1993” in Edwin A. Winckler, ed., *Transition for Communism in China*, Boulder, CO., Lynne Reinner, 1999, pp. 111-130.

¹³⁷⁵ Wang Fang, “Zai quanguo gongan zhengzhi gongzuo zuotanhui shang de jianghua [Speech at the National Forum on Political Work in Public Security],” *Renmin gongan bao*, 12 September 1989, p. 1, in FBIS-CHI, 4 October 1989, pp. 15-20; also Wang Fang, “Zai quanguo gongan zhanxian zhizhi shehui dongluan, pingxi fangeming baoluan qinggong biao Zhang dahui shangde jianghua, [Speech at the National Public Security Front’s Commendation Rally for Ending the Social Turbulence and Pacifying the Counterrevolutionary Riot],” 21 July 1989 in *Renmin gongan bao*, 25 July 1989, pp. 1.

Leninists with more rhetorical ammunition for their attacks on the Western bourgeois notion of a "non-party police force". PAP officials have drawn on Russia's post-Soviet social order problems to drive home this point. One PAP leader has pointed to attitudinal surveys taken among the Paramilitary forces of the Russian Interior Ministry that show only minority support for fighting the war in Chechnya even among the officers. He blames this shocking loss of fighting morale on the abolition of the Party Commissar system and the deterioration of Party leadership. Were it not for the Party's long-time leadership and concern with the PAP forces, he argued, the PAP would not have been able to achieve whatever success they did enjoy in 1989.¹³⁷⁶

The issue of ideology and discipline soon telescoped into a more general organizational struggle over whether or not the PLA should reassert leadership over the PAP's personnel, training, and discipline. The PAP leadership, especially Commander Li Lianxiu, faced considerable internal criticism for their "weak and lax" command in the face of demonstrations. During the martial law period, these problems were reportedly exacerbated by a series of personal clashes between PAP and regular PLA officers.¹³⁷⁷ Initially, the PLA, public security organs, and local Party organs were all ordered to "strengthen leadership" over the PAP. But soon, a growing debate emerged among police and security specialists that involved a profound criticism of the failures of the decades old CCP system of local Party Committee dominance over police organs. Although by 1990, public security officials had failed to significantly strengthen vertical professional police control of public security units, the debate helped reframe the issue of what to do about the PAP into a question of how to *centralize* its leadership system, something that

¹³⁷⁶ Du Shuyun, "Zhongguo tese de wuzhuang jingcha budui," in *Lun Zhongguo tese de gongan*, Beijing: Qunzhong chubanshe, 1998, p. 121-129.

¹³⁷⁷ As I have noted above, such criticism is implicit in the article by PLA Staff College official Guo Shenggui, "Reflections on the Theory of Countering Riots Under the People's Democratic Dictatorship," *Renmin gongan bao*, 22 September 1989, p. 3. Among others reporting such leadership criticism of the PAP are Tai Ming Cheung, *China Quarterly*, July 1996; Willy Wo-lap Lam, *China After Deng Xiaoping*, New York: Wiley, 1995, pp. 256-261, and more generally pp. 202-211; Gao Xin, *Qiao Shi*, Hong Kong: Shijie Shuju, 1996; Nan Chien, "The Present Situation of the Armed Police Force After the 'June 4' Incident," *Tang Tai* [Contemporary] (Hong Kong), 20 January 1990, pp. 10, 41, in FBIS-CHI, 30 January 1990, pp. 15-17; Willy Wo-Lap Lam, "Armed Police Leadership in Loyalist Hands," *South China Morning Post*, 16 February 1990, p. 11, in FBIS-CHI, 16 February 1990, pp. 8; Ho Po-shi, "Purge Within the Armed Police Force," *Tang tai* [Contemporary] (Hong Kong), 17 February 1990, p. 8, in FBIS-CHI, 26 February 1990, pp. 24-25; "Chinese Armed Police Force Changes its Organizational System and is put Directly Under Central Military Commission," *Ming Pao* (Hong Kong), 25 February 1990, p. 18 in FBIS-CHI, 26 February 1990, pp. 25-26; Willy Wo-Lap Lam, "Major Shuffle of Police Leadership Planned," *South China Morning Post*, 5 March 1990, p. 1, in FBIS-CHI, 5 March 1990, pp. 17-18; and Ho Pin and Kao Xin (Gao Xin), "Enigmatic Qiao Shi," *Tang tai* [Contemporary] (Hong Kong), 15 January 1993.

is far more possible in the PRC's military system than it is in the public security system.¹³⁷⁸ The other force exacerbating the debate over militarization of the PAP was the post-Deng leadership succession struggle among Yang Baibing, Jiang Zemin, Qiao Shi, and Li Peng—each of whom apparently saw control of the PAP by the organizational systems they dominated as a significant prize in the succession sweepstakes.

Another school of thought focused on the demonstrations as a “technical” issue—and stressed the need for “modernizing” PAP and public security crowd control tactics and anti-riot equipment. It was also widely accepted that the corps was far too small and lacked the kind of non-lethal demonstration control skills to contain large crowds. Both the size and sudden growth of the demonstrations had caught the MPS and PAP off guard. A review of public security officials' statements in early 1989 make clear that they never anticipated a major series of demonstrations. After Tiananmen, Minister of Public Security Wang Fang admitted quite frankly that they had greatly underestimated the potential size of the crowd.

Of course, even the most technically oriented debate still had powerful ideological assumptions behind it. Hard-line and moderate recommendations on anti-demonstration strategy turned on their varying interpretations of the motivations of the demonstrators. Those who uncritically accepted the “planned conspiracy” interpretation of the demonstrations wanted to intimidate China's foes, and were not necessarily interested in minimizing the power or even the lethality of the security forces' response. One tough-minded PLA Staff College official, Guo Shenggui, argued in *People's Public Security Daily* (*Renmin Gong'an Bao*) that since the demonstrations were tightly organized and led by conspirators, the Party and state's responses must first focus on ideological “prevention” of protests. But failing that, a swift, decisively repressive response was necessary to deter future such demonstrations. Guo's preventive techniques stressed greatly improved infiltration and surveillance of dissidents and illegal groups, in addition to ideological-moral mass education, Party building, and more careful control of economic dislocations. A decisive response required Central-level leadership coordinating groups, strict control over mass media to limit popular involvement, and better use of mass anti-riot organizations throughout government and work units. Guo also implicitly criticized both the Center and the MPS and PAP for their slow, controlled response to the Spring demonstrations by stressing that in future “riots,” the Center should make its views more clear, move quickly to declare martial law, and swiftly employ Public Security, PAP, and PLA forces to repress the demonstrations,¹³⁷⁹

¹³⁷⁸ These issues of central/provincial/local control over public security in China are analyzed in some detail in Shu Huai, Murray Scot Tanner, and Wang Jianfeng, “Central-Local Relations and State Legal-Coercive Power: Decentralized Policing, Social Control, and Rule by Law in China” draft article presented at the 2000 Midwest Conference on Asian Affairs, Bloomington, IN, 6 October 2000.

¹³⁷⁹ Guo Shenggui, “*Dui renmin minzhu zhuanzheng xia fangbao lilun de sikao*, [Reflections on the Theory of Countering Riots Under the People's Democratic Dictatorship], “*Renmin gongan bao*, 22 September 1989, p. 3.

This forceful prescription has met with strong disagreement from some MPS officials. Much of this counterattack was reminiscent of early-Spring 1989 MPS critiques of the mishandling of December 1988 Nanjing university demonstrations by local officials.¹³⁸⁰ Police scholar Du Shuyun wrote that "armed interference" in suppressing riots "...may lead to two possibilities: one is the successful suppression of the riot. But the other is the occurrence of even bigger riots and their negative effects."¹³⁸¹ In stark contrast to Guo's demand for greater forcefulness, Du Shuyun laid out six "principles" of dealing with riots which add up to a scathing attack not only on Guo, but also on the PLA's handling of the June 3-4 operation. Du contended that in using force, officials should adhere to the principles of "being cautious", "maintaining good public relations", "being humane", "letting *those who understand the crowd* give orders [implicitly, this would seem to refer to local Party and police officials]", "taking the overall situation into account," and "upholding laws and policies." His support for a professional, controlled, low-violence policing operation was clear.

Succession Politics and the Restructuring of PAP Leadership and Management

The efforts to strengthen CMC and PLA leadership over the PAP soon became inextricably intertwined with leadership politics, in particular the contest between Jiang Zemin, then-CMC Secretary General Yang Baibing, and security chief Qiao Shi. As a result of their competition, the PAP leadership underwent at least two major leadership reshuffles between 1989 and 1995, apparently in tandem with PLA leadership purges. The efforts of CMC member Yang--and later Jiang--to strengthen their position also provided a major motive force for the PLA's assertion of power over the PAP.

Throughout late 1989 and 1990, Yang Baibing pushed to strengthen the CMC's (and his own) control over the PAP's political work, command structure, and leadership at the expense of public security leaders. Yang's success in PAP personnel matters was considerable, albeit short-lived. In February 1990 the entire PAP leadership was fired, and Yang was reportedly able to place a number of officers close to him in high-ranking PAP positions.¹³⁸² Commander Li Lianxiu was replaced by Zhou Yushu, a commander

¹³⁸⁰ See the comments at the Spring 1989 Public Security Work Conference by Vice Minister Yu Lei, reported by *RMRB* cited by *Reuters*, 24 January 1989.

¹³⁸¹ Du Shuyun, "Superficial Views on the Principles Concerning the Use of Force in Coping with Riots," *Renmin gongan bao*, 17 November 1989, p. 3, in FBIS-CHI, 28 November 1989, pp. 18-19.

¹³⁸² "State Council Appoints New Armed Police Chiefs" *Xinhua*, 13 February 1990, in FBIS-CHI, 13 February 1990, p. 14. Gao Xin, in his biography of Qiao Shi, argues that none of the four officers dismissed was reassigned, and interprets this as a particularly harsh attack on officers with ties to Qiao Shi and Wang Fang. That they were not reassigned appears to be confirmed by a comparison of the men's biographies in the 1990 and 1994 editions of *Who's Who in Current Chinese Leaders*, Beijing: Foreign Languages Press. All four men---Li Lianxiu, Zhang Xiufu, Fan Zhilun and Zhang

of the Beijing Military Region's 24th Army Group, which was commended for valour in suppressing the 1989 demonstrators.¹³⁸³ All of the new PAP leaders but one were career PLA officers, not PAP or Public Security officials. The turnover also coincided with the transfer of several tens of thousands of PLA forces into the PAP as martial law was being lifted in Beijing.¹³⁸⁴

It is far less clear, however, how successful Yang was in taking organizational control of the PAP. Although several Hong Kong press sources reported in 1990 that under Yang the PAP was removed from Public Security control and placed under direct leadership of the CMC, that point is incorrect.¹³⁸⁵ The newly available materials reviewed for this chapter provide much greater support for the view that the CMC won more modest, unspecified influence over the PAP in late 1989. The real expansion of the PLA's organizational power over the PAP took place between 1993 and 1995 when Yang Baibing was long gone.

Although there were several unconfirmable reports at the time that Jiang had supported Yang's plan for a PLA take-over, the available evidence suggests that Jiang was less committed at this point, and instead tried to strike a balance between the interests of PLA leaders and provincial Party secretaries. Between 1989 and 1995 Jiang kept his views flexible, forming tactical alliances against different adversaries at different times. Official sources indicate that immediately after 1989, when Jiang's position vis-à-vis the Yang brothers on the CMC was weaker, he spoke up in defence of local Party secretaries' interests and declined to support a wholesale military take-over of the PAP. In 1990 Jiang, drawing on his experiences as a provincial secretary, argued that local Party committees and governments needed to be able to "activate" and "employ" the PAP quickly and flexibly in response to local needs. Excessive centralization would mean that during emergencies, situation reports and requests for PAP backup would have to travel up too many levels of civilian and military bureaucracy, dangerously delaying effective response.¹³⁸⁶ Jiang may have been forming a tactical alliance with provincial secretaries

Haitian--are listed in the 1990 edition, and only Zhang Xiufu appears in the 1994 edition. Moreover, Zhang was not appointed to his first post-PAP position (in Qiao and Wang's political-legal sector as Vice Minister of Justice) until 1991.

¹³⁸³ Kuo Wen-hsing in *Ming pao* (Hong Kong), 27 October 1992, p. 5.

¹³⁸⁴ Tai Ming Cheung, *China Quarterly*; and Willy Wo-Lap Lam, *China After Deng Xiaoping*.

¹³⁸⁵ Among the sources reporting or suggesting this change are Tai Ming Cheung, "Security Shuffle", *Far Eastern Economic Review*, 1 March 1990, p. 20. Mr. Cheung's later *China Quarterly* article, based on extensive PAP interviewing, seems to amend this interpretation. Other sources claiming a complete CMC takeover include Willy Wo-Lap Lam, *China After Deng Xiaoping: The Power Struggle in Beijing After Tiananmen*, Hong Kong: P. A. Professional Consultants, Ltd., 1995, p. 257.

¹³⁸⁶ Jiang Zemin's 1990 speech is discussed in Xu Yongqing, "Xinshiqi wujing budui jianshe de zhongyao zhidao sixiang, [Important Guiding Ideology for Building the

as well as Qiao Shi and the public security leaders, who were seeking somewhat more centralized control over PAP forces, but within a civilian control structure.

However successful Yang was for a time, by 1992 he and his brother had overplayed their hands badly, sparking the kind of broad opposition that the late Soviet specialist Al Meyer once labelled a "struggle *against* power." Many senior military and Party leaders grew far more fearful of the Yang brothers' power-building efforts than they were of similar efforts by Jiang Zemin. In a backlash, many senior Party leaders and senior PLA officers severally petitioned Deng Xiaoping to remove Yang Baibing from his military posts at the fall 1992 Fourteenth Party Congress.¹³⁸⁷

Three Congress decisions--to sack Yang Baibing; to give Qiao Shi charge over the increasingly influential National People's Congress; and to replace Qiao as Political-Legal Group Secretary with the far less influential Ren Jianxin--seem to have cleared the way for Jiang Zemin to expand his power over internal security in general, and over the PAP in particular. After the Spring 1993 first meeting of the new NPC, Jiang helped lead a major new reshuffle of the military leadership, in particular the PAP leadership. In a wide-ranging purge, numerous PLA and PAP followers of Yang Baibing were removed. PAP Commander Zhou Yushu was replaced by Ba Zhongtan, who had commanded the Shanghai Garrison while Jiang was coping with the 1989 demonstrations.¹³⁸⁸

Soon after the PLA/PAP leadership turnover, Jiang and the CMC reportedly adopted Yang Baibing's former recommendation, previously blocked, to place the PAP under the PLA's General Departments.¹³⁸⁹ Nevertheless, he has continued to voice understanding for local Party secretaries' desire to be able to deploy the PAP in their regions during an emergency, and a realistic understanding of the "political economy" of local PAP funding.¹³⁹⁰

The current balance of control among military and local forces was codified in the March 3, 1995 "Decision of the State Council and Central Military Commission on

PAP During the New Period]," *Qiushi*, 1997, No. 20, pp. 35-37; see also Xu's virtually identical article "Xinshiqi wujing budui jianshe de zhongyao yiju [An Important Basis for Building the PAP During the New Period]," *Zhongguo junshi kexue* [China Military Science] 1997, No. 4, pp. 23-27.

¹³⁸⁷ A number of sources report that the PAP issue contributed to Yang Baibing's ouster, but was not the major issue. These reports often differ significantly on the details of the struggle. See *Ming pao* (Hong Kong), 27 October 1992, p. 5; Lo Bing "Notes on a Northern Journey" *Cheng ming* (Hong Kong), 1 November 1992, pp. 6-8; and Lam, *China After Deng Xiaoping*, pp. 211-213, 257-263.

¹³⁸⁸ Hsia Hsiao-tan, "Law and Order: Armed Police Brought Back Under PLA Control," *Ming pao* (Hong Kong), 16 June 1993, p. 8.

¹³⁸⁹ *Ibid.*

¹³⁹⁰ Xu Yongqing (1997) *op. cit.*

Adjusting the Leadership Structure of the Chinese People's Armed Police Corps."¹³⁹¹ The Decision finally confirmed the weakening of public security control that had been going on since Tiananmen. The PAP remains under the joint leadership of the State Council and the Central Military Commission, but it is no longer a "constituent part of the public security departments". The formal leadership system was changed from "unified planning, with management and command divided by levels" (*tongyi guihua, fenji guanli, fenji zhihui*) to the much more centralized "unified leadership and management, with command divided by levels" (*tongyi lingdao guanli, fenji zhihui*). The great significance of changing "management" from being "divided by levels" to "unified" is that PAP cadres now fall under the PLA's more centralized management system rather than the public security system's much more localized system. Curiously, however, PAP manpower falls within the personnel allotment hierarchy (*bianzhi xulie*) of the State Council—a system which presumably means that even though the military gets to select and promote most PAP personnel, PAP salaries still come primarily from Central and local governments rather than from military budgets.¹³⁹² To the extent this is the case at local levels, it suggests a major potential tension between PAP/PLA leaders who choose the PAP personnel, and local governments who pay at least a significant portion of their salaries. The CMC and the State Council are also jointly responsible for the political and professional development of the PAP. Of course, as with the 1983 reorganization, the PAP is still supposed to follow PLA rules and regulations regarding political work, administrative management, and logistics.

¹³⁹¹ This document has not yet been openly published. Its contents are briefly discussed in the following official sources: *Xiandai Wujing suzhi* [The Quality of the Contemporary PAP], Beijing: Qunzhong Chubanshe, 1996, esp. pp. 3-7; Xu Yongqing, "Xinshiqi Wujing Budui Jianshe de zhongyao zhidao sixiang [Important Guiding Ideology for Building the PAP During the New Period]," *Qiushi*, 1997, No. 20, pp. 35-37; see also the very similar article by Xu Yongqing, "Xinshiqi Wujing Budui jianshe de zhongyao yiju [An Important Basis for Building the PAP During the New Period]," *Zhongguo junshi kexue*, 1997, No. 4, pp. 23-27; and Li Donghuan, "Qieshi jiaqiang dang dui Wujing Budui de juegui lingdao [Deeply Strengthen the Party's Absolute Leadership Over the PAP Corps]," *Zhongguo junshi kexue*, 1999, No. 4, pp. 98-101. Two other excellent recent sources do not mention the document by name, but use language quoting the document and describe additional detailed information about the system: *Jingbei gongzuo lilun yu shiwu* [Theory and Reality of Garrison Work], Beijing: Guofang daxue chubanshe, 1998, pp. 227-234; and Du Shuyun, "Zhongguo tese de wuzhuang jingcha budui [An Armed Police Corps with Special Chinese Characteristics]," in Chinese Police Studies Society, ed., *Lun Zhongguo tese de Gong'an* [Public Security with Special Chinese Characteristics], Beijing: Qunzhong Chubanshe, 1998, pp. 121-129.

¹³⁹² The most detailed discussion of personnel management and *bianzhi* under the new system is in Du Shuyun, "Zhongguo tese de wuzhuang jingcha budui" pp. 123-124.

Even though the 1995 State Council/CMC Decision greatly weakened public security control at the expense of the PLA, it still made significant concessions to the interests of local Party committees and governments, who continue to pay a large portion of the PAP's bills. Local Party and government leaders are permitted to "activate" (*tiaodong*) and "employ" (*shiyong*) the PAP units within their administrative regions in the event of emergencies. And in order to ensure that the PAP units work effectively with other local security officials, the Decision stated that when PAP units are involved in local public security operations, they are supposed to accept the "leadership and direction" of the local governments and public security departments in charge of such operations.

THE PAP'S SPECIALIZED SUBUNITS¹³⁹³

The recentralized, more militarized PAP leadership system, however, apparently applies primarily to the PAP's largest subunit, the Internal Guards (*neiwei*) Corps. The PAP is presently subdivided into at least eight other identifiable subunits (see Figure 12.1): the Border Defense corps (*bianfang budui*), Guards corps (*jingwei budui*), Fire-Fighting Units (*xiaofang budui*), Hydropower Corps (*shuidian budui*), Gold Corps (*huangjin budui*), Transportation Corps (*jiaotong budui*), and Forestry Police Corps (*linye jingcha* and *wuzhuang senlin jingcha*). There is also the well-known "Special Police" corps (*tezhong jingcha* or *tejing*), which is very likely subordinate either to the Internal Guards or the Guards corps in the regions where they are located. Further, the PAP also includes a State Guests Protection Corps (*guobin huwei budui*), responsible for guarding foreign dignitaries on Chinese soil. While its subordination is also unclear, it is most likely either a part of the Guards corps or perhaps a portion of the Special Police.¹³⁹⁴

These other PAP subunits all have different leadership structures dominated far more by the other State Council departments that oversee these forces (inc. the Ministries of Public Security, Transportation, Electric Power, Non-Ferrous Metals, and Forestry). They also have separate command organs within the Central and provincial-level governments and PAP Headquarters. The PAP Main Headquarters "does not constitute a direct leadership relationship" with these seven subunits.¹³⁹⁵ As their specialized names imply, most of these units have organizational predecessors that date back to the 1950s or 1960s, and were originally at least partially subordinated to a wide variety of bureaucratic units. Several of them are still at least under the "dual leadership" of a bureaucratic system other than the PLA or Public Security forces. Most significantly, these other departments are responsible for a significant share of the budget for these PAP units. In this sense, these units seem to be an internal security manifestation of the time-honored tendency of Chinese bureaucracies to try to be "large and complete" and

¹³⁹³ The main sources on the leadership and organizational structures of these PAP subunits are Zhou Yushu, pp. 58-63; and *Jingbei gongzuo lilun yu shiwu*, pp. 231, 233-234.

¹³⁹⁴ *Junqi piaopiao*, pp. 648-9.

¹³⁹⁵ *Jingbei gongzuo*, pp. 231, 233-234.

diminish their own dependence on other departments for any significant need—in this case, even including security forces. Although the focus of this paper is on the largest and politically most sensitive PAP forces—the Internal Guards, Special Police, Guards, and Border Defense forces—the organization and duties of these other units merits a brief note as it illustrates the rather balkanized nature of a significant part of the PAP.

The Forestry Police corps is comprised of two parts: public security forestry police (*linye jingcha*) and the PAP armed forestry police (*wuzhuang senlin jingcha*). These forces are responsible for guarding state forestry resources and parks, ensuring production security in these areas, and, most famously, for fighting the frequent and often horrific fires that break out in these regions.¹³⁹⁶ Their organizational roots lie in special local units established in the Northeast and Southwest during the late 1940s-1950s. In 1988 the units in the Northeast Forestry Region (principally Jilin, Heilongjiang and Inner Mongolia) were all officially converted into active duty (*xianyi*) PAP units.¹³⁹⁷ A 1995 source states that all the PAP units are in this area, though later sources indicate they are now stationed in Yunnan and other regions as well.¹³⁹⁸ The size of this corps, though still small, has apparently grown significantly, from a mere 500 in the mid-1960s to about 30,000 in the early 1980s. While it is unclear how many of these are PAP, at least 3,000 PAP forestry personnel are stationed in Inner Mongolia alone.¹³⁹⁹

The leadership and funding of these units has been rather localized and bewilderingly complex, although it may at last be undergoing reorganization. As of 1998 at least the non-PAP portion of these units were still primarily under the dual leadership of public security and forestry departments, but the exact mix of this leadership varies from locale to locale. In some areas, local public security organs play the major role, while in others it is the Forestry departments. Their manpower allotments count against the totals of the Forestry departments' at each level, but the establishment of Forestry Police offices falls under control of the public security hierarchy. The armed forestry police are considered part of the PAP hierarchy, but according to a 1998 PLA text, they are supposed to be under the "leadership and direction" of the Ministry of Forestry Industry (MFI).¹⁴⁰⁰ Finally, the expenses for these forces are paid out of the budget of

¹³⁹⁶ Zhou Yushu notes that through 1989 these units had extinguished over 4,000 fires and lost 32 police in the line of duty.

¹³⁹⁷ Zhou Yushu, p. 62.

¹³⁹⁸ *Jingcha shiyong zhishi quanshu*, pp. 24-25.

¹³⁹⁹ *Xinhua*, 23 May 2000, in FBIS. If the Inner Mongolia, Jilin and Heilongjiang PAP units are assumed to be the largest and approximately equal in size, this suggests an estimate of 9-15 thousand PAP forestry police may be reasonable.

¹⁴⁰⁰ *Jingbei gongzuo*, pp. 231, 233-234.

the MFI and, presumably, provincial and local government coffers.¹⁴⁰¹ In August 1999 *Xinhua* reported that the State Council and CMC had reorganized the PAP Forestry Police as a separate division with a new administrative system and a separate headquarters. While the report provided no details of how this may have changed the MFI's leadership role, this may indicate the establishment of a separate "Command Department" (*zhihuibu*) for the forestry police similar to those that have long existed for several other specialized PAP units.¹⁴⁰²

The PAP Gold Corps was originally established in March 1979 as part of the PLA Capital Construction Corps, and was transferred into the PAP system in 1985. It is now the largest gold prospecting and mining concern in China, with major mining and refining cites in more than twenty provinces, including Tibet, Sichuan, Gansu, Shaanxi, Xinjiang, Ningxia, Qinghai, and other provinces. It is also responsible for managing "some of the masses' gold-prospecting work." As of 1992 it was a separate PAP corps under the joint leadership of the MPS and the Ministry of Non-Ferrous Metallurgy (MNFA), but recent PLA sources indicate it is supposed to be under the "leadership and direction" of the MNFA and its departments within local governments.¹⁴⁰³ Its headquarters is the PAP Gold Command Department (*huangjin zhihui bu*), with the PAP providing the customary leadership of military training, political and logistical work. The Gold Corps' size is unknown, although it is large enough to include at least one division-level unit (*zongdui*) and several subordinate units. In recent years this corps has announced the discovery of a number of new mines, and has been given a significant role in the economic development of several impoverished, but mineral rich, interior regions. There is no way of knowing how much money the PAP makes off of gold mining, but recent reports noted that two new Tibetan mines alone had a potential value of over \$US 36 million. There have apparently been some turf disputes between the Gold Corps and local governments over control of the gold the PAP finds (at some unspecified point after discovery and opening, the PAP is *supposed* to turn the mines over to the local governments), and one purpose of the PRC Mineral Resources Law was to set ownership rules for such cases.¹⁴⁰⁴

Like the Gold Corps, the PAP Transportation Corps and Hydropower Corps were both originally established as part of the PLA Capital Construction Corps in August 1966, and both were transferred to the PAP in 1985. They are led, respectively, by the PAP Transport Command Department (*jiaotong zhihui bu*) and Hydropower Command Department (*shuidian zhihuibu*). Through at least 1992 these corps were under the joint leadership of the MPS and the Ministries of Transportation and Energy/Water Resources & Electric Power, but again, a 1998 PLA source indicates that they are under the

¹⁴⁰¹ See *Jingguan shouce*, pp. 208-210. Zhou Yushu's detailed 1992 account (p. 62) suggests a more standardized leadership system with forestry departments and local governments playing the leading role, particularly in fire-fighting and other operations.

¹⁴⁰² *Xinhua*, 4 August 1999.

¹⁴⁰³ *Jingbei Gongzuo*, pp. 231, 233-234.

¹⁴⁰⁴ Zhou Yushu, pp. 60-61; and *Xinhua*, 3 February 2000.

“leadership and direction” of these State Council ministries rather than the PAP Headquarters.¹⁴⁰⁵ Although local PAP units participate extensively in the lucrative work of traffic management, official sources indicate that the PAP Transportation Corps is overwhelmingly concerned with the construction and guarding of major highways, in particular highways in remote and border regions. Likewise, the Hydropower Corps is responsible for capital construction, engineering, and security work on energy projects, particularly in remote locations. The funding of these two corps is unclear, though one source indicates that the Hydropower Corps’ budget and accounting are independent from the rest of the PAP.¹⁴⁰⁶

Three of the specialized PAP units—Border Defense, Guards, and the Fire-fighting Corps—may all still fall primarily under the professional leadership of the Ministry of Public Security. This arrangement has endured despite the PLA’s greatly expanded control over the PAP in recent years, and reflects the long-established bureaucratic division of labour that defines these as police duties rather than military duties. All still have bureaus within the MPS that are part of the PAP *bianzhi*, and available sources indicate that unlike the other specialized PAP units, they do not have separate “command departments” (*zhihuibu*) within the PAP Main Headquarters.

Unfortunately data is not available on the manpower distribution among these various subunits and the PAP’s Internal Guard Units since 1995. The combined total of Internal Guards, Border and Fire-fighting units numbered around 500,000 at the time of the PAP’s establishment in 1983, and the addition of other specialized economic guards units three years later had only raised its total strength by around 100,000 troops.¹⁴⁰⁷ Statistics unearthed by Tai indicate that in 1995 the Internal Guards units accounted for about 63% of the PAP’s total 696,000 personnel.¹⁴⁰⁸ If that percentage held, and the standard estimate of total PAP manpower at one million is correct, then the Internal Guards alone would number about 630,000. But if all or nearly all of the approximately 150,000 new PAP troops transferred from the PLA around 1996 were assigned to the Internal Guards, then the Internal Guard’s proportion of total PAP manpower would certainly have risen substantially in the past five years.¹⁴⁰⁹

1405 *Jingbei gongzuo*, pp. 231, 233-234.

1406 Zhou Yushu, pp. 60-62.

1407 *Guang jiao jing*, p. 44.

1408 Tai Ming Cheung, *China Quarterly*, p. 530.

1409 Blasko and Corbett, “No More Tiananmens,” esp. pp. 83-86.

Table 12.3 PAP Subunit Leadership Relations

PAP Subunit	Department Providing "Leadership and Direction"
Internal Guards Corps	PAP Main Headquarters
Border Defense Corps	Ministry of Public Security
Fire-Fighting Corps	Ministry of Public Security
Guard Corps	Ministry of Public Security
Hydropower Corps	Ministry of Electric Power
Transportation Corps	Ministry of Transportation
Gold Corps	Ministry of Non-Ferrous Metallurgy
Forestry Corps	Ministry of Forestry Industry

The extraordinary bureaucratic and political complexity of these military/government command relations becomes apparent in regard to directing PAP urban "garrison work"--which explicitly includes the corps' social order control duties. The PAP headquarters of provincial-level and some smaller municipalities must establish a "Garrison Command Office" (*jingbei zhihui bu*) that incorporates the local heads of local Public Security units, the various PAP units, and all of the other concerned government offices that have PAP units within them. In performing garrison work, all PAP units are bound to follow the "Garrison Work Regulations" of the PLA, which require them to accept the "direction" (*zhidao*) of the local PLA Garrison Command Headquarters. The local PAP units, however, are responsible for "organizing the concrete implementation of the Garrison Command Headquarters' orders." One PAP leader notes that this lack of direct leadership relations over all the PAP units and the "joint leadership" (*lianhe lingdao*) system "makes organizing PAP garrison work very complex".¹⁴¹⁰

Obviously, exactly what this system of "joint government-military leadership" means in local political reality is still ambiguous. There seems to be no avoiding the conclusion of one Western military expert familiar with the PAP leadership—that the personal relationships among individual local Governors, PAP and PLA commanders, and local Public Security chiefs becomes crucial in determining how the PAP will respond in a crisis.¹⁴¹¹ At a minimum, these sources suggest that any notion that local PLA commanders exercise unfettered control over PAP internal security deployments are oversimplified at best.

The stipulation that local governments may activate the PAP and local Public Security units may command them raises even more questions of command. Several Public Security officials, however, have expressed concern about the problems the new

¹⁴¹⁰ *Jingbei gongzuo*, pp. 231, 233-234.

¹⁴¹¹ Interview, Beijing, 1998.

system may create for quickly deploying the PAP and maintaining effective coordination between PAP commanders and local Public Security officers in the event of sudden outbreaks of social disorder.¹⁴¹² In probably all major cities, Public Security Patrol Police (*xunluo jingcha* or *xunjing*) are likely to be the first forces on the scene at demonstrations or riots, and would be the first to assess whether or not PAP forces were needed to restore order. But recent internal police manuals on patrol work say virtually nothing about the rules, circumstances, or even the formal procedures under which regular public security units would seek to activate PAP forces or how local Public Security leaders are supposed to exercise their command powers during “sudden incidents.” In recent years, the MPS and many municipal Public Security Bureaus have rapidly expanded the public security anti-riot forces under their direct command. This may represent an effort by the public security system to allow it to handle more serious problems with “in-house” forces and try to avoid having to resort to PAP units that are increasingly beyond their direct organizational control.

Alternatively, many police scholars have complained in recent years that the “excessive” power of local Party and government leaders over public security and PAP forces (particularly in rural areas at and below the county level) has tempted these officials to see these forces as their personal “all-purpose organs of dictatorship.” These forces have often been abused by local officials for a variety of “improper” tasks including appropriating grain, applying pressure in economic disputes, enforcing birth control regulations, and generating local revenues by establishing improper “traffic management stations.” Many police officials have expressed great anger over the negative impact these abuses have on their reputations and on police-citizen relations. But they also complain that, given the focus on strengthening “Party leadership” over the police and military in recent years, local security officials who attempt to resist such abusive deployments have often been accused of “negating Party leadership.”¹⁴¹³ It seems reasonable to speculate that one motivation for the 1995 CMC-State Council Decision may have been to try to distance the PAP forces from this complex political equation by giving provincial-level military officials a somewhat greater say over the PAP’s deployment.

STRENGTHENING PLA INFLUENCE OVER POLITICAL WORK AFTER TIANANMEN

A powerful reassertion of the PLA’s leadership over political work was among the earliest moves toward greater PAP militarization after 1989, occurring much earlier than the formal 1995 reorganization. To keep the post-Tiananmen re-militarization of political work in proper perspective, however, it is important to stress that going all the way back to its reorganization in 1983, the PAP’s political work has *always* been subject to an

¹⁴¹² Interviews: senior public security analyst, Beijing 1999; and senior criminal investigation scholar, Beijing 1998.

¹⁴¹³ For a detailed analysis of internal police sources making these claims, see Shu, Tanner, and Wang, “Central-Local Relations and State Legal-Coercive Power.”

ambiguous mixture of guidance from three different organizational systems—1) superior-level PAP and PLA Political Departments and Party Committees, 2) Public Security Political Departments and Party Committees at the same level, and, indirectly, 3) local Party Committees at the same level.¹⁴¹⁴ Even before 1989 PAP political work was at least formally considered one of its more centralized work systems, officially stressing the “unified planning and management” system as opposed to the “management divided by levels” that dominated most other PAP and public security work. Even when the PAP was officially under public security leadership, official police sources noted that “PAP political work is a part of PLA political work...this is one of the special characteristics of the PAP corps.”¹⁴¹⁵ The PAP political work system has always been organized like the PLA commissar system rather than the public security political work system. At the level of setting central policy, the unofficial balance of influence oscillated between the PLA and the Party’s Central Political-Legal leadership, and depended on the relative power of the individual leaders involved. In the PAP’s first years PLA leaders such as General Political Department (GPD) Chief Yu Qiuli and Chief of the General Staff Yang Dezhi, as well as CMC Vice Chairman Yang Shangkun played an important role in setting nation-wide PAP political work policies and criticizing political and discipline problems in the corps.¹⁴¹⁶ Between about 1986 and 1989, however, civilian political-legal leaders such as Qiao Shi, Peng Zhen and Chen Pixian were more dominant in setting these policies.¹⁴¹⁷ Throughout this period, moreover, some Provincial level Party Secretaries have also frequently involved themselves in PAP political work—particularly in sensitive

¹⁴¹⁴ The overlapping nature of political leadership over the PAP is captured well in a 1990 PAP Discipline Inspection Committee report. Even after the GPD had begun its takeover of the PAP Party system, the PAP DIC Secretary notes that at various times his office must accept leadership from a variety of organizational superior, including the PAP Party Committee, and the Discipline Inspection Committees of the Party Center, the MPS, and the CMC. See Lu Shouyan (PAP DIC Chief), “Nuli zuohao wujing budui de jilu jiancha gongzuo [Work Hard and Do a Good Job of the PAP Corps’ Discipline Inspection Work],” in CCP CDIC General Office, ed., *Zenyang gaohao dangfeng dangji he lian Zheng jianshe* [How to Do a Good Job of Building Party Style, Party Discipline, and Clean Government], Beijing: Zhongguo Fazhi Chubanshe, 1991, esp. pp. 276-277.

¹⁴¹⁵ ZGGAYWQS, p. 1324.

¹⁴¹⁶ See for example Yu Qiuli’s speeches to the PAP, *Xinhua* 19 May 1984, 31 May 1984, 18 April 1985, all trans. BBCSWB; Yang Dezhi’s speeches cited in *Ming Bao*, 24 January 1985, trans. BBCSWB; also Yang Shangkun’s speeches *Xinhua*, 13 June 1987 and *Xinhua*, 23 February 1988, trans. BBCSWB. Unless otherwise noted all BBCSWB sources cited were accessed on Lexis-Nexis.

¹⁴¹⁷ “Peng Zhen Addresses Armed Police Leaders”, *Xinhua*, 10 January 1985, BBCSWB; “Qiao Shi on Leadership Changes and Military Training in Armed Police,” *Xinhua*, 2 December 1985, BBCSWB; and “Peng Zhen at Party Meeting of Armed Police HQ”, *Xinhua* 12 January 1987, BBCSWB.

areas such as Tibet, Xinjiang, and Beijing where local Party officials are intensely scrutinized for their ability to control social order.¹⁴¹⁸

Thus, it appears that when the PLA reasserted its leadership over PAP political work after 1989, this was accomplished more by a reassertion of informal influence within the existing system rather than a formal organizational change. As Shambaugh and others have detailed, GPD Director Yang Baibing launched this drive to tighten PLA Party control and ideological education at the November 1989 All-Army Political Work Conference.¹⁴¹⁹ A month later, on December 25, that drive was extended to the PAP at a six-day long PAP Party Committee Enlarged Work Meeting attended by over 200 delegates (which, appositely, opened on the very day that Nicolae Ceaucescu was executed by his own military forces).¹⁴²⁰ The theme of the meeting was "grasp political construction and being prepared for dealing with sudden incidents."¹⁴²¹ At the meeting the new CMC leadership ordered PAP leaders to "study the guidelines laid down by the recent enlarged CMC session and the Political Work Conference" and "place itself under the absolute leadership of the Party and obey its every order."¹⁴²² The CMC demanded that PAP leaders undertake the "important and pressing tasks" of strengthening the PAP Party structure, "ensuring the Party's absolute leadership over the police force", and "guaranteeing that all police units are forever politically qualified."¹⁴²³ The senior civilian political-legal leader at the time, Qiao Shi, did not even attend this enlarged PAP Party Committee meeting, nor did he speak at a similar Party Committee meeting in March.¹⁴²⁴

¹⁴¹⁸ See, for example, Lhasa Tibet regional service 28 December 1985 and 1 October 1988, BBSCWB.

¹⁴¹⁹ An excellent source on this is David Shambaugh, "The Soldier and the State in China: The Political Work System in the People's Liberation Army," *China Quarterly*, No. 127, September 1991, pp. 527-568.

¹⁴²⁰ James Miles notes that this act so stunned the CCP leadership that the official Chinese press did not even acknowledge it for days. See Miles, *The Legacy of Tiananmen: China in Disarray*, Ann Arbor, University of Michigan Press, 1996.

¹⁴²¹ Lu Shouyan (PAP DIC Chief), Work Hard and Do a Good Job of the PAP Corps' Discipline Inspection Work], pp. 276-283.

¹⁴²² *Xinhua*, 30 December 1989, in *FBIS-CHI*, 3 January 1990, pp. 27-28.

¹⁴²³ See the report on Li Lianxiu's speech in *Xinhua*, 30 December 1989, in *FBIS-CHI*, 3 January 1990, pp. 27-28.

¹⁴²⁴ Qiao is not among the attendees noted by *Xinhua*, 28 December 1989, in *FBIS-CHI*, 28 December 1989, p. 14 or by *Xinhua*, 30 December 1989, in *FBIS-CHI*, 3 January 1990, pp. 27-28. On the March meeting, see "Jiang, Li Peng Receive Armed Police Cadres," *Xinhua*, 30 March 1990, in *FBIS-CHI*, 3 April 1990, pp. 40-41. Qiao also did not discuss the PAP forces at the National Political-Legal Work Conference in January.

The General Political Department soon became the principal--and by about 1991 the sole--source of nation-wide political work policies for the PAP. This tie was cemented by the replacement of PAP Political Commissar Zhang Xiufu—who had served for decades in the Zhejiang Public Security apparatus—with a career PLA political commissar—Xu Shouzeng—who had risen in rank while Yang Baibing headed the GPD.¹⁴²⁵ Even though the Ministers of Public Security have continued to serve as PAP First Commissar, they have faded away into silent partners, with the soldier Directors of the PAP Political Department apparently exercising the real influence.¹⁴²⁶ It is especially noteworthy that despite evidence of the PAP beginning to establish its own independent corporate identity in recent years, there is no evidence that the PLA GPD has loosened its leadership over the PAP's Party and political work.¹⁴²⁷

Still, despite this strong assertion of military leadership over political work at the Central level, the available evidence suggests that provincial and local Party Committees have continued to play a significant role in PAP political work. In early-mid January 1990, right after the PAP Political Work Conference, a Central Document was issued calling on localities to strengthen construction of the Armed Police, including political work.¹⁴²⁸ Within two weeks, provincial Party Committees throughout the country

¹⁴²⁵ On Xu Shouzeng, see Tai Ming Cheung, *China Quarterly*; Willy Wo-Lap Lam, *China After Deng Xiaoping*; and Nicholas D. Kristof, "China Shuffles Armed Police Leadership," *New York Times*, 15 February 1990, p. A3. See also Willy Wo-Lap Lam, "Armed Police Leadership in Loyalist Hands," *South China Morning Post*, 16 February 1990, p. 11, in FBIS-CHI, 16 February 1990, p. 8; and Ho Po-shi, "Purge Within the Armed Police Force," *Tang tai* [Contemporary] (Hong Kong), 17 February 1990, p. 8, in FBIS-CHI, 26 February 1990, pp. 24-25. On Zhang Xiufu, see Gao Xin *Qiao Shi*; also Foreign Languages Press, *Who's Who in China's Current Leaders*, Beijing, 1990, pp. 673, 958, which suggests long, close ties between Zhang and outgoing Minister of Public Security Wang Fang.

¹⁴²⁶ Computer searches of the Lexis-Nexis and FBIS databases indicate that, despite the fact that the Minister of Public Security serves as PAP Chief Political Commissar, no Minister of Public Security has made a major speech on political work to the PAP since Wang Fang's closing speech to the December 1989 PAP Party Committee meeting. That speech was reported in *Renmin gongan bao*, 5 January 1990, p. 1.

¹⁴²⁷ For continued close GPD guidance of PAP political and Party-building work, see, for example, "Circular Urges Army, Police to Study Ideological Work", *Xinhua*, 22 February 2000; "Army Issues Edict on Boosting Ideological Work" *Xinhua*, 9 November 1999; and "Army Makes New Achievements in Enhancing Party Branches" *Xinhua*, 16 February 1997, all translated by the BBC Summary or World Broadcasts, accessed on Lexis-Nexis.

¹⁴²⁸ Nan Chien, "The Present Situation of the Armed Police Force After the 'June 4' Incident," *Tang tai* [Contemporary] (Hong Kong), 20 January 1990, pp. 10, 41, in FBIS-CHI, 30 January 1990, p. 16.

convened enlarged meetings of their own PAP Party Committees to communicate the message of the three meetings and the Central Document, and insist on strengthening Party control, ideological-political work, and PAP loyalty and discipline.¹⁴²⁹ In the years since a number of provincial Party Secretaries have given major addresses and issued documents on party-building and political work in local PAP units.¹⁴³⁰

The organization of the PAP Party Committee and Political Work system is virtually identical to that in the regular PLA. In PAP units at and above the detachment (*zhidui*) level, the Party has established Party Committees and political work organs with commissars who head these organs as well as taking charge of the day-to-day work of the Party organization at the same level.¹⁴³¹ Commissars are also responsible for political work and party organs in subordinate units. Curiously, according to multiple sources, PAP regulations also grant Party committees and secretaries leadership over commercial and production ventures within their units.¹⁴³²

The Party establishes Party Branches (*zhibu*) in units at the *zhongdui* level (equal to the PLA *lian*) that have three or more regular CCP members, and this constitutes the basic level of Party and political work organization. The Party Committee/Branch Secretary and Deputy Secretary head up the Committee's Secretariat (in smaller *zhongdui*, this is done by the Political Director [*zhengzhi zhidaoyuan*]). PAP Party Committees and Political Departments are supposed to organize internal subcommittees that parallel those established at the Central level (see Table 12.3). Party Branches that

¹⁴²⁹ These provincial-level meetings seemed to have varied widely in how hard they insisted that the PAP needed to strengthen its loyalty to the Party. For reports on several of these meetings, see the following: "Li Zemin Addresses Zhejiang Armed Police," *Zhejiang Ribao*, 14 January 1990, p. 1, in FBIS-CHI, 1 February 1990, pp. 12-13; "Chen Guangyi Greets Fujian Armed Police," *Fuzhou, Fujian Provincial Service*, 16 January 1990, in FBIS-CHI, 31 January 1990, pp. 33-34; "Hunan's Chen Urges Reinforcing Armed Police," *Changsha, Hunan Provincial Service*, 13 January 1990, in FBIS-CHI, 24 January 1990, pp. 35-36; and "Yang Xizong Calls on Henan Armed Police Cadres," *Zhengzhou Henan Provincial Service*, 18 January 1990, in FBIS-CHI, 26 January 1990, p. 48.

¹⁴³⁰ For examples, see *Hunan Provincial Service*, 30 December 1991; "Socialist Education for Tibet Armed Police in Preparation for 'Sudden Incidents'," *Tibet Television*, 2 June 1990; "Tibet Party Secretary Hails Police and Army Work," *Xizang ribao*, 24 August 1995, p. 1; "Xinjiang Party Chief Urges Armed Police Vigilance Against Instability," *Xinjiang People's Broadcasting Station*, 24 August 1998, all trans. BBCSWB; also Liu Huaqing's comments on the importance of provincial Party support in PAP building during his Shanxi inspection, *Jiefangjun bao*, 13 September 1994, p. 1.

¹⁴³¹ ZGGAYWQS, p. 1327.

¹⁴³² Ibid., p. 1327. The secretaries share this leadership with relevant "professional departments" at the next higher level. This point is also noted by Geng Xianyou, "Wujing budui caiwu gongzuo."

are too small to form subcommittees or appoint "commissars" (*weiyuan*) to handle organizational, propaganda/cultural¹⁴³³, youth league (CYL), discipline inspection¹⁴³⁴, security¹⁴³⁵, judicial¹⁴³⁶, masses, letters and visits, and other areas of work.¹⁴³⁷ Party Committees and Political Departments at and below the *zhongdui* level are also supposed to establish Soldiers' Committees (*junren weiyuanhui*). Along with the CYL group, these are regarded as the other "mass organs" within the PAP, and are responsible for "democratic leadership", managing the troops' activities, and maintaining *esprit* and unity among the corps. These units are under joint leadership of the Party Branch and the Commander and Commissar, usually number 5 to 7 men, and are supposed to have five subgroups (*zu*) for political democracy, economic democracy, "military democracy", cultural, women's work, and physical education, and masses work.

A major focus of post-Tiananmen PAP political work has been the expansion and strengthening of Party organizations in those lower level units where they have been undermanned or non-existent.¹⁴³⁸ Because PAP units are often, alternatively, either geographically very dispersed and isolated, or tightly mixed into urban society, senior

¹⁴³³ In addition to their regular propaganda work, these departments are apparently also responsible for soldiers' clubs and other entertainment activities.

¹⁴³⁴ These Discipline Inspection Committee are responsible for investigating corruption cases and ensuring Party discipline. In principle, all units at the detachment (*zhidui*) level and above are supposed to establish both DI committees and special DI secretaries responsible for work at their own level and in subordinate units. Below the detachment level no specialized DI organs are established, but the Party organization is supposed to designate a DI commissar. A 1990 speech by the PAP DIC Chief indicated that these units tend to be rather short on personnel and budgets, even at the Central, provincial and detachment levels. When the PAP DIC was founded at the Central level in 1984 it only had seven people. By 1990 its General Office still only had 17 personnel. Provincial PAP Corps DIC general offices were allotted a *bianzhi* of 5-7, but the majority only had 4-5, and many had only 2-3. Most detachment level DICs at this time had only one full-time discipline inspection official, and many detachments had only a part-time official. Lu Shouyan, "Work Hard," pp. 276-283

¹⁴³⁵ Security Departments (*baowei bumen*) are in charge of crime-fighting, protecting secrets, social order and safety, legal education, and fighting spies and counterrevolutionaries. These offices may be part of the Secretariat, and are apparently distinct from the various security, intelligence and secrets protection offices under the PAP unit's Headquarters.

¹⁴³⁶ The existence and functions of judicial departments is noted in *Fazhi ribao*, 21 October 1999, translation BBC Summary of World Broadcasts (hereafter BBCSWB).

¹⁴³⁷ This internal organization system is detailed in *ZGGAYWQS*, esp. pp. 1327, 1339-40, 1342-45.

¹⁴³⁸ See the comments of GPD Deputy Director Zhou Wenyan, *Xinhua*, 12 January 1991, translated in BBCSWB.

military and police leaders have periodically suggested that strong basic-level Party Committee/political work units are perhaps even more crucial for guaranteeing PAP discipline and loyalty than is the case for regular PLA units.¹⁴³⁹ In response to CMC orders, the PAP Discipline Inspection Committees in early 1990 also undertook an investigation of the Party style and discipline of the Party Committee leaders in 120 detachments (*zhidui*) nation-wide—and evaluated less than half of them as “good”.¹⁴⁴⁰ In the intervening years the PAP, sometimes in tandem with the regular PLA, has undertaken wave after wave of campaigns to strengthen lower-level Party organizations. Still, numerous reports and comments by senior leaders indicate that they have found the results disappointing.¹⁴⁴¹ Amidst the massive embarrassment of a PAP bodyguard’s 1996 robbery-murder of NPC leader Li Peiyao, however, Jiang Zemin again criticized PAP political discipline, and the new corps leaders launched yet another investigation of Party committees, but this time focusing at and above the detachment level.¹⁴⁴²

Maintaining PAP loyalty in the face of growing urban unemployment, rural instability, and the lure of spiritual groups like the Falun Gong has heightened the demands on PAP Party/political work officers. In January, 2000 a Chongqing PAP Major was arrested as a Falun Gong follower, and Amnesty International arrest records indicate rather dramatically the significant penetration of that organization throughout all of

¹⁴³⁹ For example, this argument about Party Committees has been made rather forcefully by CMC Vice Chairman Zhang Zhen. See *Jiefangjun bao*, 27 October 1995, p. 1.

¹⁴⁴⁰ Lu Shouyan, “Work Hard,” pp. 276-283, esp. p. 278.

¹⁴⁴¹ Note, for example, the continued problems noted in grass-roots Party building noted in the following reports: “Conference on Grass Roots Party-Units in Armed Police: Provinces Report Problems,” *Xinhua*, 30 June 1984; “Grass-Roots Work Forum on Causes of ‘Offences and Incidents’ in Army Units,” *Jiefangjun bao*, 9 March 1994, p. 2; “Ba Zhongtan, Zhang Shutian Address Armed Police Party Building Meeting,” *Renmin Ribao*, 29 October 1994, p. 4; “Armed Police ‘Fighting On Front Lines’ of Social Stability,” *Xinhua*, 21 January 1995; and “Army Makes New Achievements in Enhancing Party Branches” *Xinhua*, 16 February 1997, all trans. BBCSWB. In the June 1994 report, Shaanxi PAP officials note that only one third of their Party branch secretaries have undergone training and of them, 85% are “proficient” in their political work. The April *Jiefangjun bao* report, which is about both PLA and PAP, notes the weak quality of some Party members and committees, and also criticizes the use of corporal punishment against troops. In the *Renmin ribao* report, PAP Commissar Zhang Shutian is still insisting that people recognize the “urgency” of building Party organizations, and in the January 1995 report, the continued shortage of qualified, educated Party members in the PAP is still noted as a problem.

¹⁴⁴² Willy Wo-Lap Lam, “Jiang Talks Tough to Paramilitary Police,” *South China Morning Post*, 18 July 1996, p. 10; and “Armed Police Force to Strengthen Management and Education of Cadres,” *Xinhua*, 19 July 1996.

China's military and political-legal organs.¹⁴⁴³ Frankly recognizing that many PAP soldiers have relatives who have lost their jobs as a result of state enterprise reform, PAP political officers have worked overtime to reassure troops that the reforms are, in fact, "socialist" and not "capitalist",¹⁴⁴⁴ that the temporary pain of reform is in the long-term interest of society,¹⁴⁴⁵ and that the PAP must be willing to obey the Party's orders without question in the event these policies lead to unrest. Some PAP officials have also argued that the "strong localist nature" of the corps creates a special political challenge. The fact that most PAP troops serve in their home area, often for long periods of time, creates many opportunities for improper or corrupt ties to the local community. It also raises doubts in these officials' minds as to whether or not local PAP forces have sufficient emotional detachment to enforce social order.¹⁴⁴⁶

LOGISTICAL ISSUES: THE ORGANIZATION OF PAP FINANCES AND BUDGETS

The regime's goal of building an effective, professional paramilitary corps necessitates long-term stable increases in funding that some experts believe were not possible under the pre-1989 organizational system. The differences between China's highly decentralized funding system for public security and the much more centralized funding system for the PLA make it crucial that Western analysts better understand just how much the PAP has become like the regular PLA in the past decade. Since the early 1950s public security forces have relied on local government budgets—not central coffers—for the vast majority of their finances. In the past decade, public security scholars have become increasingly blunt in their criticisms that local government funding has been a crucial obstacle to building the police corps—producing chronic, serious underfunding, massive interregional imbalances in funding and manpower, and pressures for police to generate much of their own budgets through fines, fees, extrabudgetary business activities, extortion and corruption. As a "constituent part of the public security system", the pre-1990 PAP apparently also relied primarily on local government funding and extrabudgetary revenue.

¹⁴⁴³ "PRC Armed Police Officer Held Over Falungong Protest," *AFP*, 13 January 2000. See also the running list of alleged Falungong detainees posted at AI's website (www.amnesty.org), that includes numerous legal and security officials.

¹⁴⁴⁴ "*Guanjian kan kongguquan zhangwo zai shei shoul* [The Pivotal Point is to See Whose Hands Control Equity Rights]," *Renmin wujing bao*, 1 August 1998, p. 3. This article is just one of an entire page of articles encouraging PAP troops to embrace the Party's enterprise reform policies despite the widespread pain created by unemployment.

¹⁴⁴⁵ "*Dang he zhengfu xinxi xiagang zhigon* [The Party and Government's Concern for Unemployed Staff and Workers]," *Renmin wujing bao*, 1 August 1998, p.3.

¹⁴⁴⁶ *Jingbei gongzuo lilun yu shiwu*, 1998, pp. 231-232.

Although the impact that post-1990 “militarization” of the PAP may have had upon its budgets and equipment is a major issue, it is one about which very little hard information is available. A 1996 study by Shandong PAP financial official Geng Xianyou, however, provides a number of fascinating insights about the PAP funding system. Geng contends that the various PAP units now rely on funding from a mixture of three major sources: 1) “State finances” (“*guojia caizheng*”—a category that apparently includes the Central government, the PLA, and the various central government departments that maintain specialized PAP units); 2) “local finances” (the provincial, municipal/prefectural and county governments in a given PAP unit’s region), and 3) the PAP’s own extrabudgetary (*yusuanwai*) funding sources—a category that explicitly includes PAP-run businesses, and probably also includes income from fines and security fees charged from government units and enterprises the PAP guards. Alluding to recent calls by Jiang Zemin and others for military and political-legal departments to rely more on official funding sources, this study indicates only that the various government sources (rather than the extrabudgetary income) account for the bulk of these finances: “Basically [the PAP] rely on ‘eating the Emperor’s grain’”.¹⁴⁴⁷ Of course, this claim tells us little about the central vs. local mix of funding, since government funding *from any administrative department or level* could, in principal, be considered “the emperor’s grain”.

Official Central and provincial budgetary reports provide only a little help in figuring out the central/local balance. Several facts suggest that at the Central level, the PAP still occupies a budgetary line distinct from the regular PLA. Both the Finance Minister’s Budgetary Report and the Premier’s Government Work Report treat PAP spending separately from PLA funding (grouping it with government public security and state security departments). And official sources note that even after the 1995 reorganization, the PAP *bianzhi* remains under the State Council rather than the PLA, a fact that usually implies that the State Council would be responsible for PAP personnel salaries and benefits, at least at the central level.¹⁴⁴⁸ Historically, those government administrative departments that have led or employed the PAP and its various specialized

¹⁴⁴⁷ Ibid., “Tan wujing budui caiwu gongzuo [On Financial Affairs in the PAP Corps],” *Junshi caiwu gongzuo*, 1996, (Issue number unavailable), pp. 67-71, copy available from the author.

¹⁴⁴⁸ In Premier Zhu Rongji’s 2000 Government Work Report, he devoted considerable time to discussing “strengthening national defense and building up the army.” At the end of this section he shifted gears, saying “Furthermore, the people’s armed police and the public security and state security organs should be strengthened.” See *Xinhua*, 16 March 2000, in FBIS. Finance Minister Xiang Huaicheng also treats the PLA, the PAP, and the various political-legal departments as distinctive budgetary units. See “Xiang Huaicheng: PRC Defense Expenditure Increases 12.7%,” *Xinhua*, 6 March 2000, in FBIS. Some analysts refer to PAP funding as one of the various forms of “hidden spending” on national security. See “Balancing the Books,” *Janes Defence Weekly*, 19 February 1994, p. 35.

police units (e.g. the departments of public security, justice, forestry, transportation, non-ferrous metals, etc.) have all been expected to make significant contributions toward the PAP's funding, so portions of the PAP's finances are hidden throughout the central government budget.¹⁴⁴⁹

Several sources suggest, however, that the gradual militarization of the PAP's leadership since 1990 has not been accompanied by a major change in its funding sources, and that local governments are still responsible for a substantial share of its budget. A 1997 Taiwan source contends that "local finances are used to pay for equipping and paying (PAP) units."¹⁴⁵⁰ Official provincial government reports partially confirm this claim, stating that at least some increases in PAP personnel have been funded provincially, just like the personnel from public security, state security, judicial, and other government "administrative" departments.¹⁴⁵¹ PAP financial officer Geng Xianyou has confirmed this impression of a relatively decentralized formal system, describing the central-local balance this way: The major sources of financing for each PAP unit are supposed to be upper-level government units at various levels, while the PAP General Headquarters is supposed to set most major financial expenditures. Party Committees and governments at the same level are supposed to provide an unspecified "fixed amount" of funding for their local forces—an amount that varies according to the localities' relative wealth and development. Another official PLA source encapsualizes this system with the phrase "unified leadership, responsibility according to levels, management divided by levels, and financial matters reverting to those departments 'tongyi lingdao, anji fuze, fenji guanli, caiwu guikou'."¹⁴⁵² If PAP units encounter "important activities or construction projects" that they cannot cover, they are supposed to "seek support" from various local Party Committees and governments.¹⁴⁵³ Geng

¹⁴⁴⁹ In Tai Ming Cheung, *China Quarterly*, June 1996, p. 533, Table 4 cites estimates that attempts to break down the various sources of PAP financing. This source estimates that of total 1995 "appropriations" of 10.4 to 15.5 billion RMB, about 1.6 to 2.25 billion RMB may have come from local government budgets. The text of Cheung's article treats any such estimates with appropriate caution, however. The source of these estimates is unclear, in particular the origins of the estimate for PAP "income for production and business"—a figure that the PLA may very well not know with great certainty.

¹⁴⁵⁰ "The Military—Questions Concerning Troop Reductions and Military Specialist Cadres", *Inside China Mainland*, 1 November 1997, accessed on Lexis Nexis.

¹⁴⁵¹ For example: "We further reinforced the ranks of the people's armed police, public security, state security, and judicial administration." See "1995 Jiangsu Government Work Report," *Xinhua ribao* (Nanjing), 3 March 1995, pp. 1-3, in FBIS.

¹⁴⁵² See *Zhongguo junshi jingfei guanli* [Chinese Military Financial Expenditures Management], Beijing: Jiefangjun Chubanshe, 1995, the section on PAP finances is pp. 338-350.

¹⁴⁵³ Geng Xianyou, pp. 70-71.

strongly implies that local PAP units spend a good deal of time shopping around for money from local governments at many different levels. He also suggests that these units trade favours and obedience to these governments in return for greater funding, and indicates there is a "squeaky wheel gets the grease" quality to the politics of PAP funding, and has called for much greater centralization of financing in order to ensure that keypoint localities and keypoint security problems get sufficient funding.¹⁴⁵⁴

In discussing the internal administration of PAP's finances, Geng argues that the system has not been properly adapted to the new challenges and possibilities of China's much more market-based economy, and at times reflects the irrationalities of both excessive centralization and excessive decentralization. The purchase of some supply items, he charges, is "managed too centrally, managed to death", and items that local PAP corps could purchase on the market more cheaply are still subject to the "unified purchase" requirements of the old centrally-planned economy. In many other areas, however, financial control is far too dispersed and egalitarian, and many of the key equipment purchases needed to build the most vital units of the corps are regularly sacrificed to a variety of more parochial interests. For the PAP, the CMC's official financial principle "first, guarantee living expenditures; second, guarantee equipment" means focusing on equipment for "sudden incidents", major disaster relief, and supporting units in distant border areas and minority regions. It is these that Geng suggests are not getting adequate funding. "Some units willy-nilly demand funds up and down the government ladder, and then, when they get them, don't use them for building up the corps, but instead spend them to buy cars and build housing."¹⁴⁵⁵

An even more serious problem is that at lower levels, there is little or no double-checking or legal-administrative oversight of financial matters, and "what one person say, goes." The result is not only the "chaotic expenditure and chaotic use" of funds, but also a number of PAP Party Committees, professional departments and local units engaging in improper financial practises. Geng calls for truly enforcing the official rule that PAP Party Committees at each level are supposed to exercise "unified leadership over financial work" at each level, and much stronger legal oversight of PAP financing.¹⁴⁵⁶

Although the PAP's extrabudgetary involvement in business has not received a fraction of the attention devoted to the regular PLA, it is still a major source of concern. Geng Xianyou is highly critical of numerous "non-standard" sources of funds that are completely outside of normal financial control channels---the so-called "funds with 10,000 uses." PAP enterprises and production management departments in many cases simply defy CMC financial regulations that they are supposed to turn their funds over to their units' financial departments and Party Committees for accounting and expenditure. Upper level PAP financial and auditing (*shenji*) departments reportedly exercise very loose oversight of production departments, in many cases failing to make even quarterly

¹⁴⁵⁴ Geng Xianyou, pp. 69-70.

¹⁴⁵⁵ Geng Xianyou, pp. 69-71, the quote is from page 71.

¹⁴⁵⁶ Ibid., pg. 69.

or annual inspections of their ledger books.¹⁴⁵⁷ Nevertheless, despite Geng Xianyou's often brutal criticisms of extrabudgetary financial mismanagement, he insists that official state budgetary funding will never be sufficient for the PAP's needs (until China is a "developed" country), and thus PAP units still need to be more entrepreneurial and self-reliant in earning income from outside market activities.

The amounts of extrabudgetary income are difficult if not impossible to estimate, although in at least some areas they are clearly substantial. In 1994, for example, the Party Committee of just one detachment of the Shanghai PAP Corps was able to expend 230,000 *yuan* of its profits accumulated from production to set up a "relief and awarding fund" for cadres in financial difficulties. Ironically, at the time, this was seen as a positive example of "Party leadership" by PAP political officers.¹⁴⁵⁸ Even harder to estimate have been the funds generated by the massive corruption of many PAP units, in particular the Border Defence and Maritime Police units that have engaged in smuggling and other crimes for over a decade. In 1995, for example, more than 4,100 PAP officers were removed or forced to resign, mostly for corruption, and more than 1,730 were under criminal investigation.¹⁴⁵⁹

In May 2000 Vice President Hu Jintao claimed that "most of the work had been achieved" in getting the PLA, PAP and political-legal departments to withdraw from business, but he admitted that "leftover" problems still remained and sternly warned these department not to resume their commercial activities later.¹⁴⁶⁰ In a January 2000 report Central Discipline Inspection Committee Secretary Wei Jianxing reported that more than 19,000 businesses run by PLA, PAP and political-legal departments had been shut down and more than 6,400 turned over to local governments, but there is no way to estimate the number or value of those belonging just to the PAP.¹⁴⁶¹ Recent analyses by well-connected journalists have contended that Beijing has enjoyed a "qualified success" in this effort (though most reports focus almost exclusively on PLA businesses, saying little

¹⁴⁵⁷ Ibid., pp. 69-70.

¹⁴⁵⁸ "Conference on Grass-Roots Party Building in Armed Police" *Xinhua*, 30 June 1994, in BBCSWB.

¹⁴⁵⁹ See for example, "Zhuhai Border Guards Smuggling Prostitutes," *Ming pao* 21 July 1990, p. 2, in FBIS-CHI, 24 July 1990, pp. 25-26; and "'Law Enforcers' Should Be Set In Order," *Inside China Mainland* (Taipei), July 1996, pp. 37-41. A particularly striking incident occurred in Guangdong in 1996 when PAP forces guarding a smuggling operation engaged in a firefight with regular Public Security officials attempting an arrest. See "Wushi guofa de zui'e xingjing [An Evil Path Disregarding State Law]," *Renmin wujing bao*, 7 August 1998, p. 3.

¹⁴⁶⁰ "Vice President Warns Army, Police to Stay Out of Business" *Xinhua*, May 25 2000, in BBCSWB.

¹⁴⁶¹ *Xinhua*, 12 January 2000, in FBIS .

about the PAP or public security).¹⁴⁶² But the question remains how the government can realistically make up the money the PAP has reportedly lost by unloading its businesses, while simultaneously continuing a major expansion in PAP manpower and extensive improvements in expensive anti-riot equipment? If official sources are any indication, this major increase in "the emperor's grain" will not be coming from the central budget. The 2000 Central Budget claims that a mere 5.6 billion *yuan* in additional expenditures was budgeted to make up for lost business revenue for the PLA, PAP, public security, procuratorial, court, and justice departments combined.¹⁴⁶³ From the PAP's perspective, such figures strongly suggest that the Party Center still expects them to make up most of these "lost" financial sources and build the corps through other extrabudgetary sources and from the "local magistrate's grain" rather than from the "emperor's grain."

TECHNICAL-LOGISTICAL ISSUES: ANTI-DEMONSTRATION WEAPONRY AND TACTICS

For many PAP and Public Security leaders, the key lessons of June 1989 were technical and logistical: in contrast to the neighboring developmental states in Japan, South Korea, Taiwan and elsewhere, China's security forces lacked a dedicated, trained, professional anti-riot force with the right tools and training to handle the job quickly and with minimal lethality. Authors touting this view subtly bucked the heavily ideological flavour of most PAP critiques by treating demonstration control as a largely technical matter. Implicitly, they accepted the argument of many security reformers and neo-authoritarians that dealing with demonstrations was simply one of the inevitable professional duties that the police and military would have to handle. Note, for example, the palpable professional detachment in the words of this PAP analyst's interpretation of 1989:

When mobile forces dealt with eventualities (sic), a prominent problem was that their equipment and technical means were not suited to the needs of their tasks...most weapons and technical means used by the mobile forces were designed for military operations and were strongly lethal. They lacked anti-riot capabilities and non-lethal and defensive weapons.¹⁴⁶⁴

In the West, few Chinese Government claims about the massacre have been greeted with more contempt than the assertion that the Chinese government had no choice

¹⁴⁶² Susan V. Lawrence, "Excising the Cancer," *The Far Eastern Economic Review*, 20 August 1998.

¹⁴⁶³ "Xiang Huaicheng: PRC Defense Expenditure Increases 12.7%," *Xinhua*, 6 March 2000.

¹⁴⁶⁴ Bai Changqin, "My Views on Technical Equipment for Mobile Forces," *Jiefangjun bao*, 2 December 1989, p. 2, in FBIS-CHI, 28 December 1989, p. 26.

but to shoot because its police didn't have enough rubber bullets, tear gas and water cannons. The implicit moral/policy judgement of this claim--that when demonstrations cannot be peacefully suppressed, massacring unarmed protestors is by far preferable to negotiating with them--surely merits contempt. But there is strong evidence that before 1989 the PAP had developed a very limited repertoire of non-lethal crowd-control techniques. An examination of PAP/Public Security handling of the largest demonstrations in 1986-1989 reveals just a few rather ham-fisted techniques: standing aside and ignoring the protests, wading in and beating the protestors with night-sticks, flashlights or cattle prods, or firing limited volleys of tear gas followed by warning shots and then opening fire with live ammunition. It was occasionally reported that PAP forces responded to stone throwing by simply throwing the stones back, or that anti-riot actions sometimes failed, and police were compelled to fall back.¹⁴⁶⁵

After Tiananmen, soldiers and police further complained that their communications, command and control equipment were ill suited to the flexibility required to cope with the rapid movement of urban unrest. Moreover, even though Chinese society is overwhelmingly unarmed, ever since the 1983-86 anti-crime campaign the PAP and public security forces have increasingly discovered that society was far more dangerous than in Maoist times. These forces and their vehicles also lacked protection from the growing number of guns, knives, and other weapons in circulation: "In the action of rounding up the thugs, the mobile forces often paid a bloody price for [their] lack of bullet-proof clothing."¹⁴⁶⁶

Increasingly, Chinese paramilitary forces have seen their South Korean, Taiwanese and Japanese counterparts in action against demonstrators, and they have developed a long and expensive shopping list for the leaders: high-speed and collision-resistant vehicles with puncture-proof tires and plexi-glass windows to protect occupants from lynching by enraged crowds, rubber clubs, rubber bullets, ample supplies of tear gas and gas masks, bullet-proof vests, and bullet- and rock-proof shields. But Ministry of Public Security sources indicate that their research and domestic production of non-lethal weapons technology did not even begin in earnest until 1982-83, and seems to have focused principally on the apprehension of criminals rather than crowd control.¹⁴⁶⁷ At

¹⁴⁶⁵ A review of press reports of pre-Tiananmen Chinese demonstrations reveals virtually no use of tear gas before about 1987, and even several comments condemning the practise as fascistic or "foreign" to China's socialist police. The major exception, not surprisingly, was Tibet, where tear gas, cattle prods, and even "water cannons" were used against protestors during demonstrations in February 1986, October 1987, March 1988, and February 1989. See for example, *New York Times*, 9 September 1987, p. A10; *The Guardian*, 8 September 1987, p. 1; *Toronto Star*, 10 October 1987, pg. D1; *Washington Post*, 27 October 1987, p. A22; Jane MacCartney, *UPI*, 6 March 1988; *Washington Post*, 7 March 1988, p. A1; *Associated Press*, 30 June 1988; K. Wilhelm, *Associated Press*, 8 March 1988 and 9 March 1988.

¹⁴⁶⁶ Bai Changqin, *Jiefangjun bao*, 2 December 1989, p. 2.

¹⁴⁶⁷ Dangdai Zhongguo de gongan gongzuo, pp. 416-418.

least in the short term, these pressing equipment demands would require extensive imports of foreign equipment.

The effort to strengthen the PAP's armaments, however, seems to have proceeded much more slowly than moves for its political reorganization. Nineteen-ninety three appears to have been the pivotal year for efforts to begin upgrading equipment. In April the PAP Main HQ Technology and Armaments Department established a new Science and Technology Development Department, reportedly the PAP's first such scientific research institute.¹⁴⁶⁸ The new institute was headed up by Yang Junsheng—the daughter of late PLA Acting COGS Yang Chengwu. Yang Junsheng's work in promoting PAP technical development resulted in her promotion as the PAP's first female major general. In November first National PAP Equipment Work Conference convened in Wuhan and developed long-term guidelines and plans for upgrading the corps armaments and equipment.¹⁴⁶⁹ Shortly after the conference, Commander Ba Zhongtan, pleading poverty, laid out a broad-ranging shopping list in an interview with *Liberation Army Daily*:

Overall, our equipment falls far short of task requirements. For example, we do not have effective means to pursue and capture fugitives and subdue criminals and we do not have night-vision equipment...It is hoped that we can be equipped with various vehicles, ships and boats and helicopters...shields, helmets, gas masks, bullet-proof jackets, car-stopping tacks and better cars...various nonlethal and lethal weapons, cars and installations with attacking power and awesome devices for propaganda to improve our assault-launching capability...telescopes, night-vision instruments, mine-sweeping apparatuses, toxicity-sensitive instruments, locators and strong searchlights...confidential communication equipment...cooking cars, refuelling trucks, ambulances, repair trucks, cooking utensils, and stretchers.¹⁴⁷⁰

Ba closed, however, with a sobering note to those who hoped for major improvements in PAP equipment anytime soon, noting quite flatly that “there will not be drastic increases of funds allocated to the armed police.”

In 1998 the PAP attempted to strengthen its technical infrastructure through a major reorganization of its Xian-based Technology Research Institute. The Institute was renamed the PAP Engineering Institute, and its departments were reorganized to focus on R & D and training in the use of police weaponry, electronics, investigatory equipment,

¹⁴⁶⁸ “Profile: Yang Junsheng,” *Inside China Mainland*, 1 August 1999.

¹⁴⁶⁹ Wuhan Hubei People's Broadcasting Service, 20 November 1993, in FBIS.

¹⁴⁷⁰ “Commander of Armed Police Says Equipment ‘Falls Far Short of Task Requirements’,” *Jiefangjun bao*, 5 December 1993, p. 2, in BBCSWB.

construction, and military economics. The Institute's overall faculty and staff were also greatly expanded.¹⁴⁷¹

In the years since 1993 the PAP, public security organs, and other firms in several regions have significantly increased their domestic capacity to produce moderately advanced police and anti-demonstration equipment, in many cases through joint ventures with US and other foreign firms. Bullet-proof apparel and vehicles, not surprisingly, have been a major focus. One part of the 1996 Sino-US Police Training Conference was an agreement that Allied Signal Corporation would assist Chinese firms in production of bullet-proof vests.¹⁴⁷² In 1998 China Worldbest Development Corporation completed a new joint venture factory with Dupont that was expected to expand its production of Kevlar by 40 percent.¹⁴⁷³ The following year a Ningbo chemical fibre firm opened a major new production line, in part to produce bullet-proof vests.¹⁴⁷⁴ In July 2000 Xinhua touted a new, lighter-weight, more flexible line of such vests produced by a Chongqing materials research institute.¹⁴⁷⁵ Other recent joint ventures include one in Hebei with Amortech to produce explosion- and bullet-proof vehicles.¹⁴⁷⁶ In addition to bullet-proof equipment, recent reports have indicated considerable PAP pride over their development of a new WJ-94 model armoured car, police barricade vehicle, riot-control grenade launchers, high precision sniping rifles, and various unspecified 'anti-terrorist equipment.'¹⁴⁷⁷ It is also interesting to note that in 1996---seven years after Li Peng's claim that China lacked sufficient supplies of tear gas to bloodlessly suppress the Tiananmen demonstrations---China could now produce sufficient supplies of tear gas-related chemicals to export them to Iran.¹⁴⁷⁸

In recent years, Chinese munitions publications have revealed significant interest in much more advanced police and anti-demonstration equipment, in particular non-lethal crowd control devices. These analyses helped introduce security officials to various non-lethal grenades (including "stingballs", "beanbags", "sticky shockers", etc), concussion grenades, launchers, pepper sprays, rubber and wooden bullets, caltrops, sticky foams, and even laser illuminators. Analysts have shown particular interest in non-lethal grenades, carefully comparing the nature of their projectiles, their effective ranges,

¹⁴⁷¹ Zhongguo falu nianjian, 1999, pg. 990.

¹⁴⁷² Xinhua, 7 October 1996, in BBCSWB.

¹⁴⁷³ "Dupont buys Elastaine Fabrics from Tongkook," *Chemical Market Reporter*, 7 September 1998, pp. 1, 16.

¹⁴⁷⁴ Chemical Business Newbase, 2 September 1999.

¹⁴⁷⁵ Xinhua, 20 July 2000.

¹⁴⁷⁶ Financial Times Asia Info Daily China News, 7 January 1999.

¹⁴⁷⁷ "Profile: Yang Junsheng," *Inside China Mainland*, 1 August 1999.

¹⁴⁷⁸ *The Iran Brief*, 5 May 1997; *Deutsche Presse Agentur*, 12 November 1996, both citing a CIA report.

potential for injury, and the history of their use in places such as Somalia. None of these articles, however, provide any information about China's efforts to acquire these more advanced items.¹⁴⁷⁹

Despite reported increases in production capacity and efforts to improve engineering quality, the available evidence suggests that the PAP and public security organs continue to rely overwhelmingly on imports for more advanced police equipment. One senior provincial security official told a U.S. supplier in late 1996 that specialized police equipment was now being produced in China, "but the quality is not like here."¹⁴⁸⁰ For several years, export agents in the U.S. and elsewhere have arranged purchasing tours of top Western police equipment factories for Central and provincial PAP and MPS officials, and some provinces have had the funds to make major purchases. Despite great increases in domestic body armor production, for example, the futuristic "Robocop"-style anti-riot uniforms unveiled in Beijing on the eve of the Tiananmen anniversary this year were French imports originally designed for the 1998 World Cup.¹⁴⁸¹ In October 1998 the Shanghai PSB cohosted two enormous international exhibitions of police equipment—"China Police, '98" and "Securex China '98"—whose stated goal was to allow security equipment firms to discover the "huge market" for security equipment in China. Targeted technologies included biometric identification, anti-terrorist and anti-riot equipment, electric batons, and eavesdropping and surveillance equipment.¹⁴⁸²

But the key question remains whether or not PAP troops have actually been able to train with or employ such equipment, and how much PAP equipment and tactical improvements have incorporated the "lessons" of 1989. The question was begged again just before the tenth anniversary of Tiananmen, when long-time propaganda official Zhu Muzhi, repeated Li Peng's 1989 claim that lethal military force was necessary because the CCP leadership never anticipated the demonstrations and police were technically unprepared for non-violent suppression.¹⁴⁸³

¹⁴⁷⁹ "Xinqide jingyong tezhong wuqi [Noteworthy New Specialized Police Weaponry]," *Xindai bingqi*, November 1997, pp. 32-34; "Feizhimingxing wuqi zai suomali baoguang [Exposing Non-Lethal Weapons Use in Somalia]," *Xiandai bingqi*, April 1997, pp. 31-32; and "Xinxing tezhong feizhimingxing wuqi suxie [A Quick Review of New Models of Specialized Non-lethal Weapons]," *Xiandai bingqi*, January 1997, pp. 40-41.

¹⁴⁸⁰ Dan Weissman, "New Jersey Executive Builds Business with China Police," *Star-Ledger*, 28 February 1997.

¹⁴⁸¹ *AFP*, 31 May 2000, citing *China Daily* report.

¹⁴⁸² "Security: China Police '98/Securex '98," *Intelligence Newsletter*, Indigo Publications, 4 June 1998.

¹⁴⁸³ John Leicester, "Ex-Official: Poor Preparation Forced Troops to Open Fire at Tiananmen," *AP*, 9 April 1999.

The available evidence suggests very strongly that despite the PAP's clearly stated intention of modernizing and professionalizing its demonstration control tactics and equipment, very few of these improvements have made it to street level. A review of PAP operations against protestors in the past decade reveals patterns almost eerily reminiscent of its pre-Tiananmen style of policing. It appears that in many operations outside of major cities, PAP units fire tear gas (perhaps a good deal more than in the past, though there is no way of judging¹⁴⁸⁴), and usually beat a number of protestors severely, often with batons, belts, or cattle prods—sometimes to death. If this fails, the PAP fire warning shots over the heads of demonstrators.¹⁴⁸⁵ The only new non-lethal weaponry added to PAP tactics is the occasional use of water cannons.¹⁴⁸⁶ Computerized press

¹⁴⁸⁴ *The Financial Times*, 25 May 1993, p. 4, reports that while suppressing demonstrators in Lhasa, PAP forces fired tear gas "for two hours."

¹⁴⁸⁵ The Information Center on Human Rights and Democracy cites sources that China witnessed 60,000 demonstrations in 1998, and about 100,000 in 1999. See *AFP*, 16 May 2000. So any sample of demonstrations and PAP responses can only be of uncertain representativeness. Examples include Shenzhen August 1992 (see *The Guardian*, 12 August 1992, p. 8; and *Financial Times* 10 August 1992, p. 4); Lhasa, May 1993 (*Ming bao*) 28 May 1993, p. 7; also Geoffrey Crothall, *South China Morning Post*, 25 May 1993, pg. 1; "Tibetans Try Third Day of Protest, City Reported Quiet," *UPI*, 26 May 1993; *Financial Times*, 25 May 1993, p. 4); Xinning, Qinghai (Nick Driver, "Troops Quell Largest Uprising in China Since 1989," *UPI*, 29 October 1993); Yining, Xinjiang, 1997 ("Two People Shot Dead as Police Foil Rescue Bid" *Reuters* report cited in the *Toronto Star*, 29 April 1997, p. A18; Charles Hutzler, "10 Dead in Muslim Riot in West China, Government Says," *AP*, 12 February 1997; and Patrick Tyler, "In China's Far West, Tensions with Ethnic Muslims Boil Over in Riots and Bombings," *New York Times*, 28 February 1997, pg A8); Panzihua, Sichuan, October 1999 ("Crowd Clashes with Police in China; 41 Injured, Rights Group Says," *Deutsche Presse Agentur*, 9 October 1999); Yangjiazhangzi, Liaoning, February 2000 (John Pomfret, "Miners Riots Reveal the Pain of Change in China," *International Herald Tribune*, 6 April 2000, p. 1; and James Kynge, "Chinese Miners Riot Over Severance Pay," *Financial Times*, 5 April 2000, p. 9); Xian, July 2000 (Anthony Kuhn, "Fan Violence Rears its Angry Head at Chinese Soccer Match," *Los Angeles Times*, 21 July 2000, p. A1; and "Chinese Police Use Tear Gas to Quell Major Football Riot," *AFP*, 17 July 2000).

¹⁴⁸⁶ Reported use of water cannons has been rare, but appears to be increasing. One of the earliest reports of their use was against Muslim demonstrators in Yining in February 1997, against rioting Xi'an soccer fans in July 2000, and deployed in reserve to prevent Falun Gong demonstrations in Beijing in July 1999. See Mark Landler, "China Said to Prepare Ban on Sect; Protests Go On," *New York Times*, 22 July 1999, pg. A1; Patrick Tyler, "In China's Far West, Tensions with Ethnic Muslims Boil Over in Riots and Bombings," p. A8; Anthony Kuhn, "Fan Violence Rears its Angry Head at Chinese Soccer Match," p. A1; "Chinese Police Use Tear Gas to Quell Major Football Riot," and "Police Use Tear Gas to End Riot By Football Fans," *Deutsche Press Agentur*, 18 July

searches of the past several years reveal no reported PAP or public security use of even such modestly advanced non-lethal weapons as pepper spray/pepper gas or rubber bullets, let alone concussion grenades, stingballs or beanbags, foaming chemicals or laser illuminators.¹⁴⁸⁷ Pepper spray has been employed by Hong Kong anti-riot police against Chinese migrants protesting for residency.¹⁴⁸⁸

Reports indicate that in recent years PAP forces have resorted to live fire in several cases, in particular against Muslim protestors.¹⁴⁸⁹ There have also been reported cases of ineptitude, such as the May 1993 death of one PAP soldier and wounding of two others during a Lhasa protest, when a misloaded tear gas canister exploded in one soldier's hands. In several reported incidents, initial PAP operations have not only failed to contain the protests; they have apparently touched off greater mob violence that the PAP had difficulty suppressing.¹⁴⁹⁰ Among the most ominous examples of PAP

2000. This source cites the *China Daily* as reporting that the China Football Association "has dealt with 42 riots over several years, with eight incidents in Xian, including two this year."

¹⁴⁸⁷ This is based on a search of the Lexis-Nexis database (Asia/Pacific News Sources) for any reported use of these weapons between January 1998 to August 2000. Except for Hong Kong, this search revealed absolutely no report—confirmed or otherwise—of Chinese police or PAP using any of these weaponry.

¹⁴⁸⁸ "Clashes Leave 12 Injured in Hong Kong Deportation Protest," *AFP*, 26 June 2000.

¹⁴⁸⁹ Among reported incidents of PAP using live fire: the retaking of the Dongguan Mosque in Xinning, Qinghai in 7 October 1993; and clashes with Uighur militants in Aksu, Xinjiang in January, 2000. There is disagreement over whether PAP forces opened fire on a crowd in Yining, Xinjiang in April, 1997; or whether, PAP forces fired on a Shenzhen brawl in December 1995. See Nick Driver, "Troops Quell Largest Uprising in China Since 1989," John Pomfret, "Ethnic Unrest Continuing in China, Despite Crackdown," p. 4; "Two People Shot Dead as Police Foil Rescue Bid," *Reuters* report cited in the *Toronto Star*, 29 April 1997, p. A18; Charles Hutzler, "10 Dead in Muslim Riot in West China, Government Says", "Police 'Fire on Boom Town Riot'," *Financial Times*, 7 December 1995, pg. 6; Many reports on the 1997 Yining riots assert that the PAP forces beat and tear gassed the crowd, but do not report them directly firing on the crowd. They do report assertions that security forces may have secretly executed as many as 31 young Muslim men. See Patrick Tyler, "In China's Far West, Tensions with Ethnic Muslims Boil Over in Riots and Bombings," p. A8

¹⁴⁹⁰ The three PAP casualties are reported in *Ming bao* (Hong Kong), 28 May 1993, p. 7; also Geoffrey Crothall, *South China Morning Post*, 25 May 1993, pg. 1; and "Tibetans Try Third Day of Protest, City Reported Quiet," *UPI*, 26 May 1993. Another example suggesting poor coordination between public security and PAP units occurred in Beijing in 1994 when it took PAP forces well over an hour to respond to reports of a

ineffectiveness was an enormous February 2000 demonstration by miners who were being laid off in Yangjiazhangzi, Liaoning. First regular police, then "heavily armed" PAP reinforcements, failed to contain the demonstrations for a day or two, and regular PLA troops from nearby towns ultimately had to come in and fire warning shots before the demonstrations were suppressed.¹⁴⁹¹ These cases provide little evidence to suggest that the PAP has greatly improved its skills, tactics, or equipment for dealing with demonstrations since Tiananmen.

CONCLUSIONS: ASSESSING THE "REORGANIZED" PAP

The program of reorganization and re-militarization of the PAP since 1989 was driven by several analyses of the lessons of the Tiananmen failure. The most comprehensive was a belief that the leadership system needed to be restructured to make it more vertical and streamlined, so that the PAP would never again respond indecisively during a crisis. Relatedly, strengthening political work and Party building were intended to ensure the PAP's absolute, unconditional loyalty to the Party Center. A more technically-oriented analysis stressed and expansion of personnel and budgets and a dramatic improvement in equipment and tactics—*a la* South Korea, Taiwan, and Japan—to produce a modern, professional paramilitary force with the large scale non-lethal crowd control and anti-riot skills to maintain social control without producing dissident martyrs.

How should we evaluate this reorganization? To be sure, the PAP has quickly put down hundreds or even thousands of demonstrations since 1989, most, apparently, with great speed. Nevertheless, it is impossible to ignore significant shortcomings and failures in the effort to reorganize and professionalize the PAP. Notwithstanding the common claim that "the PLA has taken over the PAP" since Tiananmen, this article has provided a good deal of evidence that the re-organized leadership structure still suffers from problems of ambiguity, complexity, stratification, and a certain amount of balkanization. The CMC and PLA general departments have much greater control over PAP personnel and political work than before. But longstanding "turf" issues with local Party/government officials and police-intelligence officers concerning control of the PAP endure despite the reorganization. These organizational tensions could easily threaten future social control operations, especially if they are compounded by 1989-style leadership division over how to handle large-scale semi-organized demonstrations that increasingly feature not students or ethnic minorities, but unemployed workers enraged at corruption. Very little open source material is available on these detailed issues of

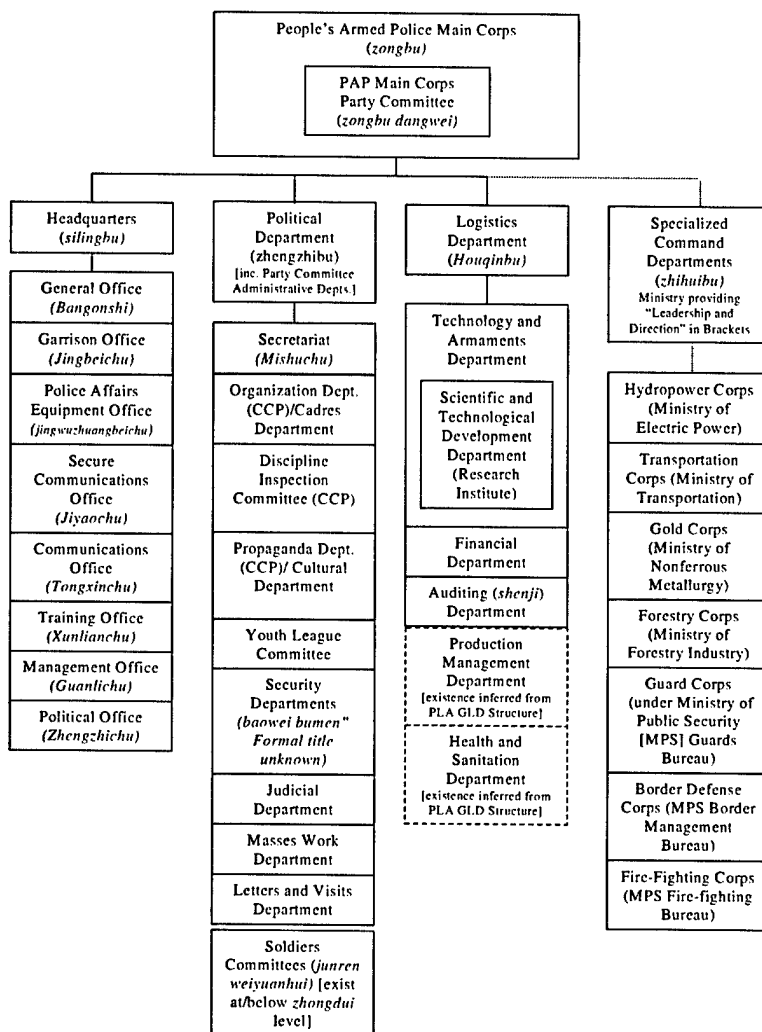
deranged serviceman randomly firing an assault rifle just blocks from the Jianguomenwai diplomatic compound.

¹⁴⁹¹ For two carefully checked reports on this demonstration, see John Pomfret, "Miners Riots Reveal the Pain of Change in China," p. 1; and James Kynge, "Chinese Miners Riot Over Severance Pay," p. 9. In a personal communication, Mr. Pomfret has kindly noted that "many local interview sources" confirmed the use of regular PLA forces after the failure of PAP forces to put down the demonstration.

command relations among PLA and local Party and government officials. But Western analysts of the PAP, Public Security forces, and social order control must pay greater attention to the possibility that weak, ambiguous coordination systems may contribute to slow PAP response to some threats to social order. Conversely, we may also lower-level military commanders may become increasingly irritated and resistant to demands for "improper" deployment of PAP forces to bail out inept and corrupt local Party officials.

There is also little evidence to suggest that the PLA's take-over (and here, that word seems appropriate) of PAP political-ideological work has produced a better disciplined, more loyal, or ideologically more committed PAP corps. Western military analysts have disparaged the troops of the PLA divisions transferred to the PAP in recent years, labelling them "the dregs". Commentaries by PAP political work officials suggest that in addition to widespread corruption problems, the PAP faces significant threats to loyalty and discipline from a variety of social sources, ranging from cross-membership in organizations like the Falun Gong, to the worrisome home situations of PAP friends and relatives who have borne the brunt of economic reform and unemployment.

Logistical and funding issues are also far from being resolved, and the legacy of a decade of PAP involvement in business may have made some of them worse. The post-1989 effort to streamline command relations runs up against a financial system that is opaque, corrupt, and bureaucratically fragmented among Central/ministerial/local and PAP self-generated funds. While much more work needs to be done on PAP financing, the information reviewed in this article suggests strongly that those who formally appoint and command PAP personnel are not, for the most part, the same officials who pay the PAP's bills—another threat to efforts to streamline and clarify command relations. The success of Jiang Zemin's efforts to get the PAP out of business merit as careful research as PLA business efforts have received. An analysis of demonstration equipment and techniques do not reveal an enormous improvement over pre-1989 PAP efforts, particularly in the realm of advanced non-lethal crowd control equipment (other than tear gas and water cannons), and PAP units still run the risk of either failing to contain major demonstrations or exacerbating mass violence by producing martyrs. After eleven years of reorganization, it is difficult to believe that the leadership of the Party and PLA can rest entirely secure that "the next time, the PAP will be there"—and the regular PLA will not have to be.

Figure 12.1 PAP Organizational Sturcture¹⁴⁹²

¹⁴⁹² Main sources include from *Zhongguo Gong'an Yewu Quanshu*, pp.1305-1309, Beijing Xinhua Domestic Service (BXDS), 9 January 2000 and Zhou Yushu pp. 59-62.

Name of School	Location	Year Established	Faculty & Staff Total	Faculty Teaching	Other Technical Staff	Students Total	Bachelors Degree Students	Specialist Degree Students	Academy Commandant (as of 1994)	Academy Commissar (as of 1994)
PAP [Main] Academy	Langfang, Hebei	1981		318	134	1524			Sun Zhongguo	Li Zhenjun
PAP Technical Academy	Xian, Shaanxi	1984	3629	485		1779	597	1182	Ding Shiyong	Zhang Guoguang
PAP Medical Academy	Tianjin	1984		203	258	3000			Wei Jitong	Gao Jun
PAP Specialist School	Xiaoxian, Shanxi	1980		188		1300				Li Jun
PAP Beijing Command School	Beijing	1984				800				
PAP Tianjin Command School	Tianjin	1984				440				
PAP Shijiazhuang Command School	Shijiazhuang, Hebei	1983				650				
PAP Hohhot Command School	Sohohot, IMAR	1983		54		600				
PAP Shenyang Command School	Shenyang, Liaoning	1985				600				
PAP Changchun Command School	Changchun, Jilin	1985				600				
PAP Harbin Command School	Suhua, Heilongjiang	1984				600				
PAP Shanghai Command School	Shanghai	1984				590				
PAP Nanjing Command School	Nanjing, Jiangsu	1990				n/a				
PAP Hangzhou Command School	Hangzhou, Zhejiang	1984				600				
PAP Hefei Command School	Hefei, Anhui	1984				450				
PAP Fuzhou Command School	Fuzhou, Fujian	1985				600				
PAP Nanchang Command School	Nanchang, Jiangxi	1984				400				
PAP Jinan Command School	Jinan, Shandong	1984				580				
PAP Zhengzhou Command School	Zhongmou, Henan	1983				600				
PAP Wuhan Command School	Xiaogan, Hubei	1990				n/a				
PAP Changsha Command School	Changsha, Hunan	1984				500				
PAP Guangzhou Command School	Guangzhou	1984				600				
PAP Nanning Command School	Nanning, Guangxi	1983				600				
PAP Chengdu Command School	Chengdu, Sichuan	1984				800				
PAP Guiyang Command School	Guiyang, Guizhou	1987				600				
PAP Kunming Command School	Kunming, Yunnan	1983				800				
PAP Xian Command School	Xian, Shaanxi	1984				480				
PAP Lanzhou Command School	Yuzhong, Gansu	1985				500				
PAP Xining Command School	Huanzhong, Qinghai	1984				400				
PAP Taiyuan Command School	Taiyuan, Shanxi	1985				600				
PAP Urumqi Command School	Urumqi, Xinjiang	1985				600				
PAP Tianjin Medical Specialist School	Tianjin	1984	40			1000				
PAP Special Police (tejing) School	Beijing	1985				60				
PAP Coast Guard School	Ningbo, Zhejiang	1983				400				

Source: Directory of Chinese Public Security Educational Institutes (Beijing, Qunzhong Chubanshe, 1994)